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A Study of Locality, Agency, and Individual Characteristics Affecting Food Stamp Program Participation in Virginia

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Abstract

This study explores participation by Food Stamp Program recipients in other government programs, factors that explain variation in food stamp participation across Virginia's localities, and ways in which the findings support other food stamp participation rate research. Virginia, with its wide range of participation rates across its 120 State-supervised, locally-administered social service departments, serves as a "natural experiment" for gaining an understanding of factors that affect food stamp participation rates across the country. Study findings show that cross-program enrollment could be improved and that local agency factors are likely contributing to differing participation rates across Virginia. This project involved a labor-intensive data collection and linking effort of census, survey, and administrative data and a detailed analysis of the dynamics of food stamp participation in Virginia, as well as a survey of local agency policies and practices.

Keywords: Food Stamp Program, Temporary Assistance for Needy Families, food assistance programs, multi-program participation, program participation rate, Virginia, FANRP, ERS, USDA



Food Assistance
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Research Program

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VDSS staff handled the labor-intensive task of extracting and linking the databases. They also provided guidance on the FSP and other government program policy as well as possible variables of interest for the regression analyses. Mr. Timothy Thomas, formerly with the Data Warehouse unit, extracted the April 2003 FSP database.

The Research Office staff, headed by Dr. Erik Beecroft, handled most of the data extracting, gathering, and linking tasks. Mr. Michael Theis used his considerable skill and experience to extract and link the other government program data to the April 2003 FSP database. Mr. Theis also developed the measures for many of the explanatory variables through manipulation of the linked data files. In addition, Mr. Theis created the FSP participation rate maps included in this report. Ms. Molly Sheahan managed the VDSS local administrator survey, including follow-up with each agency to ensure 100 percent completion. In addition to data collection and management, Dr. Erik Beecroft provided the analysis of “take-up” rates for various subgroups of the FSP population.

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EXECUTIVE SUMMARY

Over the past several years, USDA has encouraged and supported research efforts to describe and explain Food Stamp Program (FSP) participation rates. Research about the root causes of state-level variation in FSP participation rates has largely concentrated on individual demographic and economic characteristics. Some studies, however, give evidence of agency and community level influences on the FSP participation rate.

This study explores the use of multiple government programs by FSP cases. Virginia, with its wide range of participation rates across its 120 state-supervised, locally-administered local social service departments (local agencies), serves as a “natural experiment” for gaining an understanding of factors that affect FSP participation rates across the country. At the end of April 2003, Virginia had 165,861 food stamp cases, accounting for about 1.9 percent of the nation’s cases.¹ The average 2003 monthly food stamp benefit was \$167, or about \$18 less than the national average.² Overall, in terms of household size, household composition, and income sources and amounts, Virginia comes close to mirroring national averages. Virginia’s food stamp caseload also mimics the national caseload in terms of percent white (45 percent), but the percent African American is considerably higher than in the nation as a whole (50 percent compared to 32 percent), and the Hispanic food stamp population is smaller (1 percent compared to 12 percent). However, these race and ethnic differences are also true of the broader Virginia population.³

The research questions here are: (1) What is the participation by Food Stamp Program cases in other government programs? (2) What is the variation in the FSP participation rates across Virginia’s counties and cities? (3) What factors explain the variation in Food Stamp Program participation across Virginia’s localities and in what way do the findings support other FSP participation rate research?

This project involved a labor-intensive data collection effort and a detailed analysis of the dynamics of FSP participation in Virginia. There were four primary tasks: (1) identifying and collecting data for possible explanatory variables; (2) linking and aggregating data files for the analyses; (3) conducting the multi-program analysis; and (4) completing the exploratory regression analysis. The April 2003 FSP cases were used as the foundation of the data linking. In addition, a survey of local agency administrators was conducted during the summer and fall of 2004. This survey was designed to obtain basic information about local agency policies and practices.⁴

¹ Cunnyingham, K. and Brown, B. Characteristics of Food Stamp Households: Fiscal Year 2003, Mathematica Policy Inc., 2004, Table B-1, p. 65

² Ibid. Table B-2, p. 66.

³ The July 2003 estimate for percent Black is 13 percent for the U.S. and 20 percent for Virginia, and the July 2003 estimate for percent Hispanic is 14 percent for the U.S. and 5 percent for Virginia. Source: Table 4: Annual Estimates of the Population by Race Alone and Hispanic or Latino Origin for the United States and States: July 1, 2003 (SC-EST2003-2004, Population Division, U.S. Census Bureau, September 30, 2004).

⁴ Funds requested for a local agency survey were not included in the Phase I grant, so VDSS decided to independently carry out a small survey effort asking some basic questions about FSP operations.

For this study, PA (Public Assistance) FSP cases were defined as those with at least one member of the assistance unit receiving either Social Security Supplemental Security Income (SSI) or Temporary Assistance for Needy Families (TANF). Non-Public Assistance (NPA) cases are all food stamp cases not classified as PA. There are some significant demographic differences between the PA and NPA cases. PA cases are less likely than NPA cases to include children of any age (43 percent compared to 57 percent) or children under age six (24 percent compared to 33 percent). At the same time they are more likely to include a person age 60 plus (31 percent compared to 16 percent). Consistent with this age distribution, PA cases are more likely than NPA cases to be one-person households (50 percent compared to 39 percent).

A high 89 percent of Virginia's food stamp cases had members who received benefits or subsidies from at least one of the other government supported programs included in this study; by far the most common was Medicaid (84 percent). The other 11 percent only received food stamps. In terms of the cash programs, slightly more than half of Virginia's April 2003 food stamp cases received SSI (32 percent), Old Age, Survivors, and Disability Insurance (OASDI) (30 percent), or TANF (13 percent). Some received assistance from only one of the cash programs and others received assistance from a combination of these programs. The most common patterns were either SSI (28 percent) or OASDI (27 percent) only or both SSI and OASDI (22 percent). A somewhat smaller proportion received TANF only (17 percent) or some other combination of SSI, OASDI, and TANF (6 percent).

Looking at the "cash" programs from the perspective of the other government programs, 72 percent of SSI recipients in Virginia and 77 percent of TANF recipients receive food stamps, still leaving room to improve cross program enrollment, as many SSI and TANF participants are categorically eligible for food stamp benefits.

Looking at cross program participation from the perspective of the other non-cash programs, 51 percent of the Medicaid recipients, 48 percent of the Energy Assistance cases, 43 percent of the Child Care Subsidy cases, and 40 percent of the WIC participants are enrolled in the FSP. Each of these programs has eligibility criteria that would negate the possibility of 100 percent participation in the FSP. Individual eligibility information is also not known, but the possibility of room for more cross-program enrollment is likely.

Findings show evidence of multiple government program use, but there is still room for more cross-program enrollment and marketing.

Geographic analysis found that the FSP participation rates across Virginia's localities varied widely. Virginia's total recipient participation rate was 41 percent based on the number of individuals receiving food stamps relative to the number of individuals under 130 percent of poverty in the locality. Locality individual participation rates ranged from 18 percent to 74 percent. Although there was some regional clustering of participation rates, there were also contiguous localities with very different rates, indicating that local agency policies and characteristics may be influencing program participation.

Regression models of Total, PA, and NPA FSP participation rates were estimated. After controlling for the effect of Medicaid, TANF, and SSI, locality and agency factors were found to play a significant role in explaining the variation in FSP ratios across localities.

Findings also show support for other FSP participation rate research, including clarification and exploring other potential explanatory variables. This project paved the way and pointed to the “to do” list to complete the analysis of Virginia’s FSP participation rates across localities. Future research may provide confirmation as well as an important deeper understanding of how the dynamics of FSP participation rates work, particularly from the perspective of local agency characteristics, policies, and procedures. While information about the relationship between locality characteristics and the FSP is informative, locality characteristics are largely out of the control of policymakers. On the other hand, policymakers and administrators impact the intersection of the FSP with other government programs and can modify local agency policies and procedures to raise participation rates.

A Study of Locality, Agency, and Individual Characteristics Affecting Food Stamp Program Participation in Virginia

INTRODUCTION

Over the past several years, USDA has encouraged and supported research efforts to describe and explain the Food Stamp Program (FSP) participation rates. Castner and Schirm (2004) developed a detailed method for calculating participation rates that takes into account income status as well as eligibility criteria such as citizenship and household resources. These rates are called the “official rates.” The Castner and Schirm 2002 estimates show state participation rates in fiscal year 2002 ranging from 39 percent to 81 percent, with a national average of 54 percent.⁵ Virginia’s 2002 rate was 52 percent, just below the national average and the 33rd highest among the states. Virginia’s Participation Access Rate (PAR) calculated by USDA’s Food and Nutrition Service based on 100 percent of poverty was 55 percent, the 40th highest in 2003.⁶ More recently the PAR rate was redefined as the program access index (PAI), calculated by USDA based on 125 percent of poverty.⁷ Other participation rate calculation methods exist, but the end message is the same; there is a wide variation in FSP participation rates across states. (See Appendix A for a list of acronyms used.) The participation rates used in this study use the 2000 U.S. Census population under 130 percent of US Department of Health and Human Services poverty adjusted for student and other group populations as well as by Census Bureau Small Area Income and Poverty Estimates (SAIPE) data to the year 2003.

Research studies have also explored the reason for variation in FSP participation rates. Research about the causes of state-level variation in FSP participation rates has largely concentrated on individual demographic and economic characteristics. The July 1999 study, “Customer Service in the Food Stamp Program,”⁸ found that nonparticipation in the FSP was due to lack of awareness of eligibility as well as demographic factors, with aged adults significantly contributing to nonparticipation and number of children significantly contributing to participation. Another study, “Trends in Food Stamp Participation Rates: 1999 to 2002”⁹ examined FSP participation trends among subpopulations with high participation rates. Those with high participation rates included cases that received high Food Stamp benefits, Temporary Assistance for Needy Families (TANF) and Supplemental Security Income (SSI) recipients; households with very low income; and children. Those with traditionally low participation rates included the elderly, citizen children living with noncitizen parents, households with earnings,

⁵ Castner, L. and Schirm, L.A. “Reaching Those in Need: State Food Stamp Participation Rates in 2002.” Mathematica Policy Research, Inc. 2004, www.mathematica-mpr.com/publications/PDFs/fns02rates.pdf.

⁶ www.fns.usda.gov/html/federal_food_prgrams/FSP/Participation_Rates_03.html (May 31, 2005).

⁷ www.fns.usda.gov/cga/Federal-Register/2005/020705.pdf, page 7 (June 25, 2005).

⁸ Ponza, M., Ohls, J.C., Moreno, L., Zambrowski, A., and Cohen, R. “Customer Service in the Food Stamp Program.” Washington, D.C. Mathematica Policy Research, Inc. 1999, www.fns.usda.gov/oane/MENU/Published/FSP/FILES/ProgramOperations/fspcust.pdf.

⁹ Cunyningham, K. “Trends in Food Stamp Program Participation Rates: 1999 to 2002.” Mathematica Policy Research, Inc. 2004, <http://www.fns.usda.gov/oane/MENU/Published/FSP/FILES/Participation/Trends99-2002.pdf>.

and households with incomes above the poverty threshold. Economic factors associated with FSP participation have also been examined from a household perspective. Kornfeld concluded that “The economy had an especially strong effect on caseloads from multiple-adult households with children and on adults living separately.”¹⁰

Other studies give evidence of agency and community level influences on the FSP participation rate. A study of TANF leavers in Illinois showed that “in Chicago, neighborhood characteristics and knowledge of FSP eligibility at the district office level are important factors in understanding the FSP participation decision of TANF leavers even after individual and family level demographics are taken into account.”¹¹ The study found “that the proportion of people in poverty in a census tract is an important influence on food stamp take-up in Chicago.”¹² Another study of Oregon Food Stamp Applicants highlighted the stories that FSP program applicants told about the barriers to enrollment.¹³ Applicants related stories of long lines, appointments that were not actually appointments, and other agency processes that can affect FSP enrollment.

In response to this growing effort to understand FSP participation rates, the Virginia Department of Social Services (VDSS) proposed to study the variation in participation rates across Virginia’s localities. Virginia, with its wide range of participation rates across its 120 state-supervised, locally-administered local social service departments, serves as a “natural experiment” for gaining an understanding of factors that affect FSP participation rates across the country.¹⁴ Virginia’s local departments of social services (local agencies) function within localities that are similar to states in that each is an independent political entity possessing different organizational structures. Each locality has a great deal of freedom in how it implements policy and organizes its work. Nationally it is difficult to determine what factors improve or discourage access to food stamps because both the policies and other factors vary state to state. Virginia is an ideal laboratory for this research because the existence of significant variation in Virginia’s 120 localities indicates that non-policy factors have a great deal of influence. See Appendix B for a list of the 120 localities with social service departments. Note that in some cases two or more localities cooperate to support one social service office.

This study was conceived as the first part of a larger study on local participation rate variability in Virginia. Here the multiple program and initial regression analyses are presented addressing the following research questions: (1) What is the participation by Food Stamp

¹⁰ Kornfeld, R., “Explaining Recent Trends in Food Stamp Program Caseloads.” USDA ERS. 2002, www.ers.usda.gov/Publications/efan02008/.

¹¹ Goerge, R.M., Reidy, M., Lyons, S., Chin, M., and Harris, A. “Understanding the Food Stamp Program Participation Decisions of TANF Leavers.” Chapin Hall Center for Children at the University of Chicago. 2004.

¹² Ibid. p. 33.

¹³ Northwest Federation of Community Organizations, Oregon Action, “Confronting Barriers: Stories of Oregon Food Stamp Applicants.” April 2004.

¹⁴ The Commonwealth of Virginia is unusual in that it permits cities to be independent of counties. In some cases the independent city is surrounded by a county, and can also contain the county seat (e.g., Winchester City and Frederick County). These cities must maintain their own government equivalent to a county government. Consequently, a discussion of Virginia localities must include both counties and independent cities. The only other independent cities in the United States are Baltimore, Maryland and St. Louis, Missouri.

Program cases in other government programs? and (2) What is the variation in the FSP participation rates across Virginia's counties and cities? Following the multiple program analysis, findings are presented related to the third research question: (3) What factors explain the variation in Food Stamp Program participation across Virginia's localities and in what way do the findings support other FSP participation rate research?

Virginia's April 2003 FSP Cases

At the end of April 2003, Virginia had 165,861 food stamp cases, or about 1.9 percent of the nation's food stamp cases.¹⁵ The average 2003 monthly food stamp benefit was \$167, or about \$18 less than the national average.¹⁶ Overall, in terms of household size, household composition, and income sources and amounts, Virginia comes close to mirroring national averages. Based on 2003 Quality Control (QC) samples summarized in the Characteristics of Food Stamp Households, the average food stamp assistance unit size in Virginia is 2.2 compared to 2.3 in the nation.

¹⁵ Cunnyingham, K. and Brown, B. Characteristics of Food Stamp Households: Fiscal Year 2003, Mathematica Policy Inc, 2004, Table B-1, p. 65.

¹⁶ Ibid. Table B-2, p. 66.

Virginia's food stamp population is within 6 percentage points of the national average on a range of household composition characteristics. Virginia's 2003 caseload was slightly less likely to have assistance units (AUs) with children (52 percent compared to 55 percent) and somewhat more likely to have AUs with the elderly age 60 plus population (24 percent compared to 18 percent). (See Table 1.) The Virginia caseload was also slightly more likely to include AUs with single adults with children (38 percent compared to 34 percent) and disabled non-elderly individuals (28 percent compared to 23 percent).

In terms of income and FSP benefits, Virginia's food stamp cases again came close to the national average with a few exceptions. The average monthly 2003 income for all food stamp cases was \$640, and Virginia closely mimicked this with an average of \$638. Consistent with this, Virginia and the nation also had close to the same percent of food stamp cases with incomes over 100 percent of poverty (11.1 percent and 11.7 percent, respectively) and cases between 51 percent and 100 percent of poverty (56 percent and 50 percent, respectively). Virginia had a slightly higher percent of cases with no gross income (16 percent compared to 12 percent). The primary exception to Virginia's congruence with national averages was related to receipt of SSI or OASDI income. Virginia food stamp cases had a higher than average percent receiving income from these sources (34 percent compared to 28 percent for SSI Income, 33 percent compared to 23 percent for OASDI income). Thus, while countable income¹⁸ was close to the national average, the source of some of the income was somewhat more likely to be SSI or OASDI.

Table 1. Demographic Characteristics of National and Virginia's Food Stamp Households¹⁷			
Food Stamp Household Characteristics		2003 National Percent of AUs	2003 Virginia Percent of AUs
Household Size	Average Number in AU	2.3	2.2
Household Composition	With Children	55%	52%
	With Person Age 60 Plus	18%	24%
	Single Adults w/Children	34%	38%
	Disabled Non-elderly Individuals	23%	28%
Income	No gross income	12%	16%
	With Earned Income	28%	31%
	With SSI Income	28%	34%
	With OASDI Income	23%	33%
	With TANF Income	17%	13%
	With GA Income[`]	6.5%	1%
	Countable Resources	\$154	\$167
	Gross Countable Average Monthly Income	\$640	\$638
	Net Countable Income	\$348	\$364
	Gross Income as Percent of Poverty (101%+)	11.7%	11.1%
	Gross Income as % of Poverty (51 to 100%)	50%	56%
FSP Benefit	Average FSP Benefit	\$185	\$167

¹⁷ Cunyningham, K. and Brown, B. Characteristics of Food Stamp Households: Fiscal Year 2003, Mathematica Policy Inc., 2004, Tables B-2, B-3, B-5, and B-6.

¹⁸ Countable resources are "Cash on hand and assets that can be converted easily to cash, such as money in checking or saving accounts, savings certificates, stocks or bonds, and lump sum payments. They also include some nonliquid assets, although the family home, certain family vehicles, and business tools or property are not counted."

Like food stamp cases, food stamp recipients in Virginia generally resemble food stamp recipients across the country with respect to gender, age, and citizenship. About three-fifths are female. (See Table 2.) About two-fifths are non-elderly adults between the ages of 18 and 59. While the percentage of non-elderly adults mimics the national percentage, Virginia's caseload is slightly more likely to include elderly (11 percent compared to 8 percent) and slightly less likely to include children (48 percent compared to 51 percent). As in the nation as a whole, well over 90 percent of Virginia's food stamp recipients are U.S. citizens.

Virginia's food stamp caseload also mirrors the national caseload in terms of percent white (45 percent). However, the percent African American is considerably higher than in the nation as a whole (50 percent compared to 32 percent), and the Hispanic food stamp population is much smaller (1 percent compared to 12 percent).

These race and ethnic differences are also true of the broader Virginia population.²⁰ However, other VDSS research shows higher than average FSP participation rates for African Americans of all ages and for older Hispanics. The VDSS research also shows lower than average FSP participation rates for Hispanics under age 60 and "other race" people of all age groups.²¹

Thus, with only a few exceptions, Virginia's food stamp cases reflect the national averages. In fact, Virginia's food stamp recipient and case characteristics are almost the prototype of the typical food stamp participant.

Table 2. Demographic Characteristics of National and Virginia's Food Stamp Recipients¹⁹			
Food Stamp Recipient Characteristic		2003 National Percent of Recipients	2003 Virginia Percent of Recipients
Percent Female		59%	61%
Age	Pre-School Age Children (4 or less)	17%	16%
	School Age (5 to 17)	34%	32%
	Non Elderly Adults (18 to 59)	41%	41%
	Elderly Adults (Age 60 Plus)	8%	11%
U.S. Citizenship		94%	97%
Race / Ethnicity of HH Head	White	45%	45%
	African American	32%	50%
	Other Race	4%	3%
	Hispanic	12%	1%

From *Characteristics of Food Stamp Households: Fiscal Year 2005*, USDA FNS, September 2006, Food Stamp Program Report No. FSP-06-CHAR, p. 27, www.fns.usda.gov/oane/MENU/Published/FSP/FILES/Participation/2005Characteristics.pdf.

¹⁹ Cunyningham, K. and Brown, B. *Characteristics of Food Stamp Households: Fiscal Year 2003*, Mathematica Policy Inc., 2004, Tables B-9, B-10, B-11, and Table A-23.

²⁰ The July 2003 estimate for percent Black is 13 percent for the U.S. and 20 percent for Virginia, and the July 2003 estimate for percent Hispanic is 14 percent for the U.S. and 5 percent for Virginia. Source: Table 4: Annual Estimates of the Population by Race Alone and Hispanic or Latino Origin for the United States and States: July 1, 2003 (SC-EST2003-2004, Population Division, U.S. Census Bureau, September 30, 2004).

²¹ VDSS Office of Research.

METHODOLOGY

The research questions are as follows: (1) What other government-supported programs do the April 2003 food stamp cases use? (2) What is the variation in food stamp participation rates across Virginia's counties and cities? and (3) What factors explain the variation in Food Stamp Program participation across Virginia's localities and in what way do the findings support other FSP participation rate research?

This study involved a labor intensive data collection effort and a detailed analysis of the dynamics of FSP participation in Virginia. There were four primary tasks: (1) identifying and collecting data for possible explanatory variables; (2) linking and aggregating data files for the analyses; (3) conducting the multi-program analysis; and (4) completing the exploratory regression analysis.

Identify and Collect Data

The first task was identification and collection of data for variables of interest that addressed the research questions. To obtain variables potentially explaining FSP participation rates data were collected from the April 2003 master food stamp file, data files for other benefit and service programs, a special set of Census data, and other published sources.

Linking administrative data is considered a fruitful method of producing high-quality data for food assistance program research. USDA's Economic Research Service encouraged projects proposing to link administrative data, and has also made research on multi-program participation a priority. However, linking administrative data can be difficult, and few studies have been successful at linking more than two datasets. For a discussion of the issues and difficulties of linking data, see Wittenburg, et al.,²² and for a literature review see Cole.²³ Because of these difficulties, this project was considered a particularly ambitious undertaking.

April 2003 FSP Data. The research team began by focusing on the food stamp data. It was clear that a full set of data was needed for the food stamp population. It was also clear that the study would make use of the 2000 Census data. Thus, the goal was to stay as close to the 2000 date as possible. When the study began in the fall of 2003, it was necessary to make a special request for an extract of Virginia's food stamp data file. Since mid-2002, VDSS had begun transferring data from its transactional eligibility determination system to a data warehouse system that is to be used for data access and reporting. It was not economically possible to request an extract from the transactional system, and based on knowledge of the transition process, it was decided that April 2003 was the earliest time in which to extract the food stamp data from the new data warehouse system with confidence in the integrity of the data. Thus, April 2003 was selected for the extract. In the fall of 2003, it was not possible to

²² Wittenburg, David, Loren Bell, Anne Kenyon, Michael Puma, Carol Hanchette, Stephen Bell, Chris Miller, and Vivian Gabor, *Data Development Initiatives for Research on Food Assistance and Nutrition Programs, Phase I—Ten Potential Data Initiatives*. USDA, Economic Research Service, E-FAN-01-010, December 2001, chapter III, section 7, www.ers.usda.gov/publications/efan01010/.

²³ Cole, Nancy. *Feasibility and Accuracy of Record Linkage to Estimate Multiple Program Participation, Volume I, Record Linkage Issues and Results of the Survey of Food Assistance Information Systems*. USDA, Economic Research Service, E-FAN-03-008-1, June 2003, chapter 2, www.ers.usda.gov/publications/efan03008/efan03008-1/.

automatically extract from the new system, but it was possible to access the system with special programming. A programmer with in-depth knowledge of the new system wrote the program to extract the full set of FSP data for the April 2003 time period. The data is called April 2003, but it was actually extracted as of May 1, 2003 and contains records for all recipients active at the end of April 2003. There are 379,081 food stamp recipients and 165,861 food stamp cases in the April 2003 data file. The April 2003 FSP database included information on food stamp recipient demographic and program characteristics. This included factors contributing to their eligibility and participation in other government programs such as Medicaid, SSI, and OASDI.

Other Government Program Data. Once the decision was made to use April 2003 as the base time period, arrangements were made to extract data from other VDSS and state agency systems to match this time period. Where possible, data were extracted for the March 2002 to April 2003 time period. Where this was not possible, April 2003 data were extracted. While VDSS and other Virginia state agencies have expanded their data resource capability in recent years, actually extracting and pulling together the requisite data was a major undertaking involving a high level of cooperation within VDSS and with other state agencies. VDSS research staff gained significant experience in this area through their work on welfare reform evaluations. The databases all contain unique identifying numbers either at the case or recipient level. The extracted databases are listed in Table 3.

Table 3. Government Program Data Extracted from State Information Systems		
Database	Source	Description
TANF	VDSS ADAPT System	Application Benefit Delivery Automation Project. Full set of program and demographic characteristic data for all TANF recipients and assistance units in April 2003 and in previous months back to 1992.
Medicaid	Virginia Department of Medical Assistance Services	Program and demographic information on Medicaid recipients active from March 20, 2002 through April 30, 2003.
Energy Assistance (LIHEAP)	VDSS Energy Assistance Program	Energy assistance cases both for fuel and cooling in federal fiscal year 2003.
WIC	Virginia Department of Health	Case and client information for WIC activity in April 2003.
Child Care Subsidy	VDSS Child Care Interim System	Client level information including demographics and payments information for children served, April 2003.
Child Support	VDSS Child Support Data System (APECS)	Child support activity including support orders, payment activity, and arrearages during 2003.
VEC	Virginia Employment Commission Wage Records	The Virginia Employment Commission or VEC data are quarterly wages reported by Virginia employers and matched by social security number to the April 2003 FSP recipients.

Special 2000 Census Data. VDSS purchased a special set of tables from the Bureau of Census.²⁴ These tables exclude all persons attending a public or private college or university at the undergraduate or graduate level, on active duty in the U.S. Armed Forces, and institutionalized in group quarters. The special Census tables show locality level data by age groups, household composition, race groups, and several HHS-defined poverty thresholds. The 130 percent of poverty threshold—the income eligibility for food stamps—was used for calculation of the FSP participation rates and for development of potential explanatory variables. The 100 percent of poverty level²⁵ was used for the percent of the eligible population enrolled in TANF. Data about household composition, race, and age was also used to develop other potential explanatory variables, such as the percent of one-person households, the percent nonwhite, and the percent of households with a person over 70 years old. This is a large set of tables, with over 500 EXCEL worksheets. Since, the FSP April 2003 data were collected several years after the collection of the 2000 Census data, the Census data were updated to 2002 using the SAIPE.

Data Sources. Data for the description of the food stamp population in Virginia and the multi-program analysis came from the April 2003 Food Stamp File and the other program databases. Data for the participation rate analysis came from these two sources as well as the special Census tables, VDSS administrative data, official data posted at web sites, and a brief exploratory survey of local agency sources. (See Appendix C.)

The survey of local agency administrators was a short paper-and-pencil survey of top local agency administrators (the Director or the Food Stamp Supervisor) conducted during the summer and fall of 2004. The local agency administrator survey was designed to obtain basic information about local agency policies and practices.²⁶ It was exploratory, using dichotomous yes/no responses to questions about possible facilitators like mail slots, extended hours, computer processing, and outreach. The survey also included questions about communication options, such as walk-in, appointment, phone, in home, or other methods of accomplishing the FSP enrollment processes. Responses to open-ended questions also described a variety of facilitators and barriers to participation in their localities. The survey was administered by email and fax, with intensive follow-up by VDSS staff to achieve a 100-percent completion rate so that a complete set of data could be included in the participation rate analyses. The survey instrument is in Appendix C, and summary results are in Table 4.

Other data sources included information that could be accessed from web sites. For example, data on the existence of public transportation, the agricultural use of land, square miles, the use of Meals-on-Wheels, and population per square mile came from web sites. Other data, such as a locality's Food Stamp Employment and Training program (F-SET) or Able-Bodied

²⁴ The special Census tables were purchased with funds outside of the ERS grant supporting this study.

²⁵ Poverty thresholds available at: www.census.gov/hhes/www/poverty/threshld.html.

²⁶ Funds requested for a local agency survey were not included in the Phase I grant, so VDSS decided to independently carry out a small survey effort asking some basic questions about FSP operations.

Table 4. Response of Virginia Local DSS Agencies to Food Stamp Survey

Question	Agency Responses	
	Percent	Number
<i>Type of food stamp worker</i>		
Generic worker	78.3	94
Food stamp specialist	4.2	5
Both	17.5	21
<i>Average monthly caseload per worker</i>		
Way too high	20.8	25
A little too high	41.7	50
Generally manageable	33.3	40
Somewhat lower than staff could handle	2.5	3
A lot lower than staff could handle	.8	1
No response	.8	1
<i>Available methods for application and recertification activities (Number and percent of local agencies using each method)</i>		
Prescreening eligibility available through		
Appointment at local agency	31.7	38
Walk-in at local agency	90.8	109
Outreach center	7.5	9
Phone	50.0	60
Home visits	11.7	14
Eligibility interview available through		
Appointment at local agency	89.2	107
Walk-in at local agency	60.8	73
Outreach center	9.2	11
Phone	60.0	72
Home visits	49.2	59
Document verification available through		
Appointment at local agency	40.0	48
Walk-in at local agency	86.7	104
Outreach center	7.5	9
Phone	55.8	67
Home visits	23.3	28

Table 4. Response of Virginia Local DSS Agencies to Food Stamp Survey (continued)

Question	Agency Responses	

Recertification available through		
Appointment at local agency	99.2	119
Walk-in at local agency	32.5	39
Outreach center	8.3	10
Phone	65.8	79
Home visits	50.8	61
<i>Other local agency practices and procedures</i>		
<i>(Number and percent of agencies using each practice or procedure)</i>		
Agency has extended hours for application or recertification interviews	46.7	56
Outside mail slot or drop box available for document submission	38.3	46
Emergency Food Stamps available immediately	73.3	88
Document verifications retained for future program applications	81.7	98
Agency staff trained/encouraged to inform potentially eligible clients about FSP	98.3	118
Outreach by agency staff to potential FSP recipients	50.0	60
Outreach by advocates or other community agencies to potential FSP recipients	42.5	51
<i>Other questions</i>		
	<i>Mean</i>	<i>Median</i>
	<i>Response</i>	<i>Response</i>
Staff has time and resources to encourage and help potential applications? (Scale 1 to 7; 1 = Encourage; 7 = Discourage)	2.2	2
Local government support for agency mission (1 = Very Supportive, 7 = Not at all Supportive)	2.5	2
Level of cooperation between agency other food providers, like food pantries, soup kitchens, and other alternative food resources in the locality (1 = Very Good Cooperation; 7 = Very Poor Cooperation)	1.7	1

Adults Without Dependents (ABAWD) status and the existence of a viable One-Stop offices,²⁷ came from VDSS records and administrators.

Development of the City/County Database

The regression analyses required a City/County Database with data aggregated to Virginia's 120 combined localities. Virginia has 134 actual independent localities (cities or counties), but some local agencies administratively serve two or more contiguous counties and independent cities. Since all of the April 2003 Food Stamp data and the other government supported program data were at the individual or case level, the data had to be aggregated to the 120 combined localities.

Data Selection. Identifying, collecting, and selecting variables for use in the participation rate analyses was an iterative process. Initially the research team reviewed the literature and relied on their own experience, as well as on the in-house knowledge of the food stamp staff, to define variables of interest. The research team then informally interviewed several local agency directors about factors that affect food stamp participation in their localities. A large list of several hundred variables was developed from this process. While all of these variables were of interest, obtaining data for each of these variables was not possible. VDSS staff reviewed the list and assessed the possibility of accessing the data. Virginia Tech consultants and VDSS staff also identified variables they deemed essential to the analysis. In short, winnowing of the list was based on both relevance and availability. After initial analysis, it became clear that there were additional important areas not sufficiently covered by the database. Thus data measuring additional variables were added to reflect current thinking on factors affecting FSP participation rates.

Linking the Data. The April 2003 file contains both case and client level identifiers known as the ADAPT number and the Client ID. The VDSS and the Medicaid files contain these client or case identifiers as well as the social security number. The files were linked using either the ADAPT number or the Client ID, depending on the level of information available. When the ADAPT number or Client ID was not available the social security number was used. The VEC files were linked using social security numbers. The WIC file also included a last name and date of birth, so the link was made on the social security number and a last name and date of birth match.

²⁷ "One Stops" or Coordinated Economic Relief Centers contain both employment services and social services. See www.vec.virginia.gov/ for more information. Also see *Using One-Stops To Promote Access to Work Supports—Lessons from Virginia's Coordinated Economic Relief Centers: Final Report*, November 2003, at: www.ers.usda.gov/publications/efan03010/.

Aggregating the Data. For each of the selected variables, data were aggregated using dBase IV, EXCEL, or ACCESS. The program used depended on the source of the data and the person responsible for aggregating the data. Regardless of what software was initially used, the total set of aggregated data was collected in a master EXCEL file, the City/County Database.

Data Cleaning. Once the master City/county Database was prepared, the data were imported into SPSS. SPSS was used to double check for accuracy and to run initial descriptive statistics. Descriptive statistics included a check for variables with high bivariate correlations. Where high correlations were found, one of the variables was eliminated. The clean file was then converted to SAS for the actual regression analyses. The decision on which program to use for any given process was primarily dependent on which program afforded the most portability and which program was best suited for the task.

Analyses

The analyses include a review of the characteristics of the FSP caseload, a study of the use of multiple government supported programs, and regression analyses of FSP participation rates. The analyses used the data from all of the sources described above.

Characteristics of Virginia's Food Stamp Population. To compare Virginia's food stamp population to the nation's food stamp population, published 2002 information in Cunyningham and Brown (2003)²⁸ was used. These data were based on QC sample data collected by USDA for monitoring purposes. Since these are 2002 sample data, small differences are expected between published percentages and percentages derived from the full set of April 2003 population data.

To put the multi-program and participation rate analysis in perspective, Virginia's food stamp population was described using the April 2003 FSP database. The data were summarized using SPSS and ACCESS. Aggregate, unduplicate, merge, cross tab, frequency, and descriptive statistics functions were used to identify key assistance unit and individual characteristics.

Multi-Program Analysis. The April 2003 FSP database, including the food stamp participation data and the SSI and OASDI data items were used in the multi-program analysis. The other government program data extracted to match the April 2003 food stamp data were also used. The data used in the analysis were at the case level. The data were linked using the same guidelines described above under, "Development of the City/County Database." The end result was a case level data file with all cases tagged for use of the government programs: Medicaid, SSI, TANF, OASDI, Energy Assistance, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and Child Care Subsidies. Cases that had one or more members enrolled in these other government programs were tagged as participating in the program.

Participation Rate Analyses. Completion of the regression analyses required calculation of participation rates. Both the "official rates" (Castner and Schirm, 2004) and the PAR participation rates had limitations for this study. The purpose of this current study was to

²⁸ Cunyningham, Karen and Brown, Beth, *Characteristics of Food Stamp Households: Fiscal Year 2003*, Mathematica Policy Inc., 2003, <http://www.mathematica-mpr.com/publications/PDFs/2003characteristics.pdf>.

examine the variability of participation in the FSP across localities. The 100 percent of poverty used in the PAR rates limited the variability. The Castner and Schirm participation rates use 130 percent of the poverty level, but not of gross income.²⁹ The Castner and Schirm rates are adjusted for various FSP eligibility criteria such as asset holdings and citizenship status. These modifications could not be made for Virginia's localities with the available data and resources for this study. This study's participation rate analysis is based on gross income only and will overstate the number of eligibles and underestimate the participation rate. However, since the focus of this research is to compare across localities, these biases are not thought to affect the findings.

Initially, based on available data, participation rates for localities were developed using the 2000 Census data for persons under the 100 percent of the Bureau of Census poverty threshold. Upon review, these initial participation rates were clearly not reasonable for localities that had large student or institutional populations. In response to this concern, VDSS purchased the special set of tables from the Bureau of Census. The denominator for the total participation rate is the locality level aggregate population count of all persons under 130 percent of the HHS poverty level who are **not** undergraduate or graduate students, who are **not** on active duty, and who are **not** institutionalized in group quarters. The numerator of the total participation rate was the total number of April 2003 FSP recipients.

For the PA recipient participation rate, the denominator included all persons receiving SSI, but not OASDI, in the locality based on December 2003 data from the Social Security Administration,³⁰ plus all persons receiving TANF in the locality, and a small adjustment for General Assistance (GA).³¹ In Virginia, the GA program is very small,³² so this was a very small adjustment, but it was felt that it was substantively important to include the GA program. The numerator of the PA recipient participation rate was all persons in the April 2003 FSP database receiving SSI (but not OASDI), or TANF, or receiving a GA payment. It was assumed that there was no overlap in benefits across these three programs at the recipient level.

The NPA recipient participation rate was then calculated. The NPA numerator was the total number of April 2003 food stamp recipients in the locality minus the recipients in the PA numerator. The NPA denominator was the total number of eligible persons in the locality minus the people in the PA denominator.

²⁹ The Microsimulation model used by Schirm and Castner to estimate eligibility uses 130 percent gross income and 100 percent net income, as well as asset test, and other eligibility criteria. Elderly households are not subject to the gross income test, and categorically eligible households are not subject to the net, gross, or asset tests.

³⁰ Social Security Administration, Office of Policy, SSI Recipients by State and County, 2003, http://www.socialsecurity.gov/policy/docs/statcomps/ssi_sc/2003/.

³¹ GA data was not used in the multi-program analysis, but an adjustment for GA was included in the participation rate analysis.

³² There were 2,373 GA payments made from VDSS between July 2002 and April 2003.

The resulting participation rates are lower than the Castner and Schirm and PAR participation rates for two reasons: (1) the population base is expanded from 100 percent of the Census poverty threshold used in the PAR estimates to 130 percent of the HHS poverty level; and (2) the rates used in this study are based on gross income under 130 percent of the HHS poverty level, not the “net” income after adjustments used by the Castner and Schirm estimates.

PA and NPA recipient participation rates had considerably different relationships with the total recipient participation rate. There was a strong correlation ($r = .935, p < .01$) between the NPA rate and the total rate and a weak correlation ($r = .292, p < .05$) between the PA and the total rate. There was also a weak correlation ($r = .216, p < .05$) between the PA and NPA participation rates. Due to these significantly different correlations with the total participation rate, analyses were conducted for the PA and the NPA FSP populations separately.

Box 1. Public Assistance and Non-Public Assistance Cases - Definitions

PA = Public assistance

PA defined as food stamp cases with at least one member receiving SSI or TANF

PA participation rate =

$$\frac{\text{PA food stamp recipients}}{[(\text{All persons receiving SSI, but not OASDI}) + (\text{All persons receiving TANF}) + \text{GA adjustment}]}$$

NPA = Non-public assistance

NPA defined as foods stamp cases where none of the recipients received SSI or TANF

NPA participation rate =

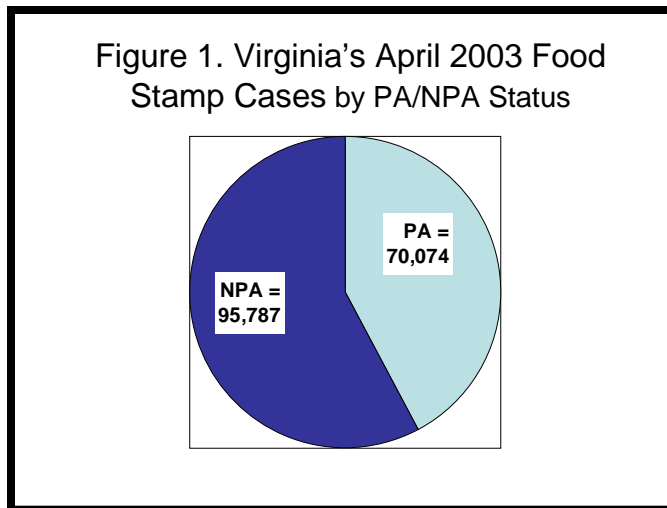
$$\frac{[\text{Total food stamp recipients} - \text{PA food stamp recipients}]}{[\text{Total number of eligible persons} - \text{PA food stamp recipients}]}$$

Participation rates are based on ratios of recipients or individuals relative to the eligible population. However, for the multiple program analysis the focus needed to be on cases in order to discern the pattern of program use in a “case” or “household.” Thus, the definition of PA and NPA was not specific to an individual, but to the “case” as a whole.

For this study PA food stamp cases were defined as those with at least one member of the assistance unit receiving either SSI or TANF. In April 2003, 70,074, or 42 percent, of Virginia’s FSP cases were PA FSP cases. SSI and TANF cases are interesting because individuals eligible for these programs are categorically eligible for food stamp benefits. However there are restrictions such that an individual may be eligible for food stamps, but not also for SSI or TANF.

NPA cases are all food stamp cases not classified as PA. That is, none of the recipients in the NPA cases received SSI or TANF. In April 2003, 95,787, or 58 percent, of Virginia's FSP cases were NPA cases. (See Figure 1.)

The definition of PA and NPA used for this study differs from the FSP definition where cases are defined as PA if all members of the assistance unit receive SSI, TANF, or GA, and NPA if they do not all receive assistance from one of these programs.³³



³³ The FSP caseload PA and NPA designation was considered unreliable for use in this study. Review of case records found that worker case classification as NPA or PA was erratic. This was reported to program staff for correction in the future, but no reasonable correction could be made to the files already extracted. Thus, the PA and NPA determinations were defined as described above. In Virginia, the GA program is very small and locally managed. Specific GA case and recipient data were not available for this analysis. However, estimates of GA enrollment were made for the participation rate analyses.

FINDINGS

The multiple program use analysis looked at the use of SSI, TANF, Medicaid, WIC, OASDI, Energy Assistance, and Child Care Subsidies for the April 2003 FSP cases. This study looked at multi-program participation at the case level because program benefits, such as cash payments and services, usually indirectly benefit the whole assistance unit, even when only one person in the assistance unit is the actual recipient.

Given the different eligibility criteria for the PA and NPA classification, it is not surprising that PA and NPA cases have some distinctly different demographic characteristics. The PA assistance units differ from the NPA food stamp cases in terms of household composition and source of income.

PA assistance units are less likely than NPA cases to include children of any age (43 percent compared to 57 percent) or children under age six (24 percent compared to 33 percent). (See Table 5.) At the same time they are more likely to include a person age 60 plus (31 percent compared to 16 percent). Consistent with this age distribution, PA assistance units are more likely than NPA assistance units to be one person households (50 percent compared to 39 percent).

Table 5. Demographic Characteristics of Virginia's PA and NPA Food Stamp Households			
Food Stamp Household Characteristics		2003 PA FSP Cases	2003 NPA FSP Cases
Household Size	Average Number in AU	2.1	2.4
Household Composition	With Children	43%	57%
	With Children < 6	24%	33%
	With Person Age 60 Plus	31%	16%
	One Person AU	50%	39%
	With Earned Income	22%	51%
	With OASDI Income	34%	27%
	Gross Countable Average Monthly Income	\$633	\$543
	Child Support	8%	8%

While PA food stamp cases are less likely than their NPA counterparts to have earned income (22 percent compared to 51 percent), they are more likely to have OASDI income (34 percent compared to 27 percent) and they also had higher average gross monthly countable incomes (\$633 compared to \$543). Clearly, a significant part of their gross countable income came from other government programs.

Looking at the food stamp recipients only among the PA and NPA cases, consistent with the case characteristics, recipients in PA cases were less likely to be children (42 percent compared to 49 percent) and more likely to be age 60 plus (16 percent compared to 7 percent). (See Table 6.) Recipients in PA and NPA cases were equally likely to be single and never married (about two-fifths). The distribution of recipients in PA and NPA cases by race was somewhat different for the two groups, with PA recipients slightly more likely to be African American (56 percent compared to 53 percent) and NPA recipients slightly more likely to be white (44 percent compared to 40 percent).

Multiple Program Participation

Members of food stamp cases are also eligible for other federal and state government supported programs. Over four-fifths (89 percent) of Virginia's food stamp cases had members who received benefits or subsidies from at least one of the other government supported programs included in this study. The other 11 percent only received food stamps.

Medicaid (84 percent) was commonly used. Just under one-third of the cases had a member receiving one of the social security programs – SSI (32 percent) and OASDI (30 percent). Close to one-third (29 percent) received Energy Assistance, 16 percent had WIC benefits and 11 percent received TANF benefits and services. Five percent received child care subsidies. (See Table 7.)

Each of these cash and subsidy programs has eligibility criteria, making them more or less likely to be used by food stamp participants.

Medicaid. Medicaid covers individuals with a comprehensive range of services, including hospital care, doctor's visits, prescriptions, mental health services, and rehabilitative services. Children and pregnant women with countable family income below 133 percent of the federal poverty level who meet other non-financial requirements are eligible for Medicaid. TANF families and SSI recipients are generally eligible for Medicaid.³⁴

Table 6. Demographic Characteristics of Virginia's FSP Recipients in PA and NPA Cases

Food Stamp Adult Recipient Characteristic		2003 Percent of Recipients in PA Cases	2003 Percent of Recipients in NPA Cases
Gender	Percent Female	62%	60%
Age	Percent Child < 18	42%	49%
	Percent Working Age Adult (18 to 59)	42%	43%
	Persons Age 60 Plus	16%	7%
Race and Ethnicity	White	40%	44%
	African American	56%	53%
	Other Race	5%	4%
	Hispanic	3%	4%
Marital Status Adults	Single, Never Married	40%	41%

Table 7. Multi-Program Use for Virginia's April 2003 Food Stamp Cases

Benefit or Subsidy Program	Total	Percent of All Cases
Total Cases	165,861	100%
Medicaid	139,243	84%
SSI	53,173	32%
OASDI	49,341	30%
Energy Assistance	48,537	29%
WIC	26,431	16%
TANF	22,266	13%
Child Care Subsidies	7,639	5%

³⁴ TANF and Medicaid are no longer federally linked, but most states, including Virginia, continue to entitle most TANF recipients to Medicaid.

SSI. Supplemental Security Income (SSI) provides income for persons who are disabled, blind, or age 65 and over with low income and low resources. Persons over age 65 do not have to be disabled or blind. This is an income supplement for people who do not get regular social security or their Social Security benefits are so low they do not preclude SSI eligibility. SSI is funded from general tax dollars, not Federal Income Contributions Act (FICA), “payroll taxes”.

OASDI. The Social Security Administration (SSA) administers Old Age Survivor and Disability Insurance (OASDI). OASDI covers regular retirees, disabled people who qualify for disability based on their time working in a job covered by OASDI and survivors. OASDI is funded by FICA. OASDI benefits are linked to Medicare in that individuals receiving disability benefits for a certain period of time are categorically eligible for Medicare. In addition, once you reach age 65, you are eligible for Medicare so most people eventually will be getting both OASDI and Medicare. If OASDI income is very low, a person may, depending on the state, also qualify for Medicaid.

Energy Assistance. Energy Assistance, or HHS’ Low Income Home Energy Assistance Program (LIHEAP), is available for households with gross incomes below 150 percent of the HHS poverty level. Energy Assistance payments are made to cooling, heating, or fuel providers on behalf of the participating households. These payments or allowances are not considered income to the household. Virginia does not use the categorical eligibility option for households with at least one member of the household receiving TANF, SSI, or Food Stamps. Energy Assistance cases are not automatically eligible for food stamps.

TANF. Temporary Assistance for Needy Families is a block grant program that provides assistance and work opportunities for needy families with children under 18 years of age. In Virginia, families with net incomes less than 100 percent of the poverty level are eligible. Able-bodied adult recipients must work at least 30 hours in one-parent households and 35 hours in two-parent households or be engaged in other allowable employment related activities such as job search. TANF recipients are generally eligible for Medicaid. With the lower income eligibility, it is also assumed that TANF cases are generally eligible for food stamps.

WIC. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides food, nutrition counseling, and access to health services for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children under age five who are found to be at nutritional risk. The maximum income for Virginia WIC participants is 185 percent of the HHS poverty level. Applicants who have family members receiving free or reduced school lunches or enrolled in FAMIS (Virginia’s SCHIP program) are automatically eligible for WIC benefits and services. Persons who are eligible for TANF, Medicaid, or Food Stamps who meet the other eligibility criteria are also eligible for WIC. WIC cases are not automatically eligible for food stamps.

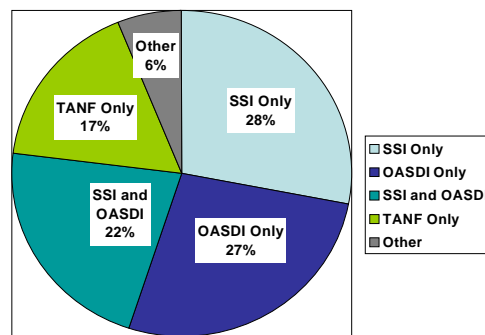
Child Care Subsidies. Subsidies for child care services are provided for eligible families with children who need care and who are under age 13 or, under special circumstances, for children up to 18 years of age. In Virginia there are three geographically based eligibility groupings: 130 percent, 150 percent, and 185 percent of the HHS poverty guidelines. These eligibility groupings reflect differences in the local cost of living. TANF cases with employment are categorically eligible for Child Care Subsidies.

Participation in at least one of these government supported programs is common. About 11 percent of FSP cases only received food stamps. The remaining 89 percent of the food stamp cases had a member of the FSP assistance unit participating in one or more other programs: 46 percent participated in one other program, 35 percent in two other programs, and 8 percent in three or more other programs.

Participation in Cash Programs.

In terms of the cash programs, slightly more than half (58 percent) of Virginia's April 2003 food stamp cases received SSI, OASDI, or TANF. Some received assistance from only one of the cash programs and others received assistance from a combination of these programs. They most frequently received either only SSI (28 percent) or only OASDI (27 percent) or both SSI and OASDI (22 percent). (See Figure 2.) A somewhat smaller proportion received TANF only (17 percent) or some other combination of SSI, OASDI, and TANF (6 percent).

Figure 2. Virginia's April 2003 Food Stamp Cases
Cash Program Participation



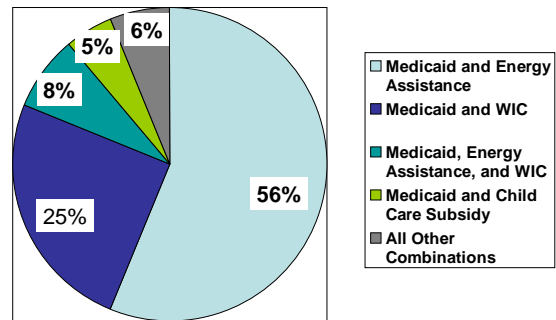
Looking at the “cash” programs from the perspective of the other government programs, available data shows that 72 percent of SSI recipients in Virginia and 77 percent of TANF recipients receive food stamps. Thus, while the majority of SSI and TANF recipients are enrolled in the FSP, there is still room to improve cross program enrollment. Most SSI recipients and virtually all TANF recipients should generally be eligible for food stamps, thus the percent of these two groups enrolled in the FSP can still be higher.

Participation in Non-cash programs. In Virginia, there is a joint application for FSP and Medicaid. Thus, it is not surprising that most (95 percent) of the FSP cases participating in only one other non-cash program were enrolled in Medicaid. Medicaid eligibility is also closely tied to eligibility for several of the other programs (SSI, TANF, and WIC). Of the 41 percent enrolled in two or more other non-cash programs, the most common combination was Medicaid and Energy Assistance (56 percent); followed by Medicaid and WIC (25 percent); Medicaid,

Energy Assistance, and WIC (8 percent); and Medicaid and Child Care Subsidy (5 percent). (See Figure 3.)

Again looking at cross-program participation from the perspective of the other non-cash programs, 51 percent of the Medicaid recipients, 48 percent of the Energy Assistance cases, 43 percent of the Child Care Subsidy cases, and 40 percent of the WIC participants are enrolled in the FSP. Each of these programs has eligibility criteria that would negate the possibility of 100 percent participation in the FSP. Individual eligibility information is also not known, but the possibility of room for more cross-program enrollment is likely.

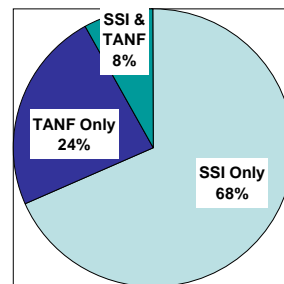
Figure 3. Virginia's April 2003 Food Stamp Cases and Participation in Two or More Non-Cash Programs



SSI and TANF Participation. While Medicaid and some other program was the most frequent combination of multiple program participation for the total set of food stamp cases, either SSI or TANF participation was a prerequisite for classification as PA FSP cases for this analysis. At least one member of the FSP assistance unit had to receive SSI or TANF for the case to be classified as PA. Of the PA FSP cases, 68 percent had a member of the assistance unit enrolled only in SSI, 24 percent only in TANF, and the remaining 8 percent in both of the programs. (See Figure 4.)

Given the program eligibility differences, it is not surprising that participation in other programs also varied by PA or NPA case status. The close relationship between the SSI and Medicaid, and TANF and Medicaid programs resulted in virtually all PA food stamp cases (98 percent) participating in Medicaid. About one-third of the PA food stamp cases also participated in Energy Assistance (36 percent), OASDI (34 percent), and TANF (32 percent). (See Table 8.) A smaller percent of the PA food stamp cases received WIC (14 percent) or Child Care Subsidies (5 percent).

Figure 4. Virginia's April 2003 PA Food Stamp Cases and SSI and TANF Participation

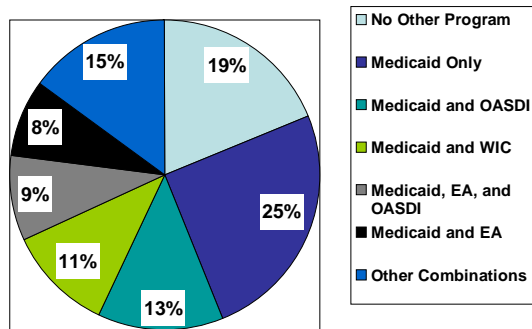


By definition, the members of the NPA food stamp cases do not receive either SSI or TANF. The members of the 95,787 NPA food stamp cases were, however, potentially eligible to receive benefits or subsidies from the other government supported programs. Like their PA counterparts, Medicaid was the most commonly used “other program.” Unlike, their PA counterparts, receipt of Medicaid was not a given. In Virginia, enrollment in the FSP does not automatically make a person categorically eligible for Medicaid. Children below the income threshold are still categorically eligible, but adults are not. Twenty-six percent (25,071 cases) of the NPA food stamp cases did not have a member of the assistance unit enrolled in Medicaid. Of the FSP recipients without Medicaid, 26 percent were children who may be enrolled in FAMIS.³⁵ The other 74 percent were adults, 65 percent between the ages of 18 and 59, and 9 percent age 60 or older.

NPA food stamp cases were less likely to participate in all of the other programs. Almost one-fifth (19 percent or 18,305 cases) were not enrolled in any of the other government supported programs included in this study. (See Table 7.) Twenty-five percent were only enrolled in Medicaid. Most of the rest (49 percent) enrolled in Medicaid and one or more other programs. The remaining 7 percent enrolled in OASDI, Energy Assistance, WIC, or a combination of these programs, but not in Medicaid. The 18,305 NPA cases that were not enrolled in any of the other government supported programs represent 11 percent of all the food stamp cases. These are the “food stamp only” cases. (See Figure 5.)

Table 8. Comparison PA FSP and NPA FSP Use of Other Government Programs				
	PA Cases		NPA Cases	
Program	#	%	#	%
Medicaid	68,527	98%	70,716	74%
SSI	53,713	76%	N/App	
OASDI	23,585	34%	25,756	27%
Energy Assistance	25,248	36%	23,289	24%
WIC	9,560	14%	16,871	18%
TANF	22,266	32%	N/App	
Child Care Subsidies	3,302	5%	4,337	5%

Figure 5. Virginia's April 2003 NPA FSP Cases and Multiple Program Participation



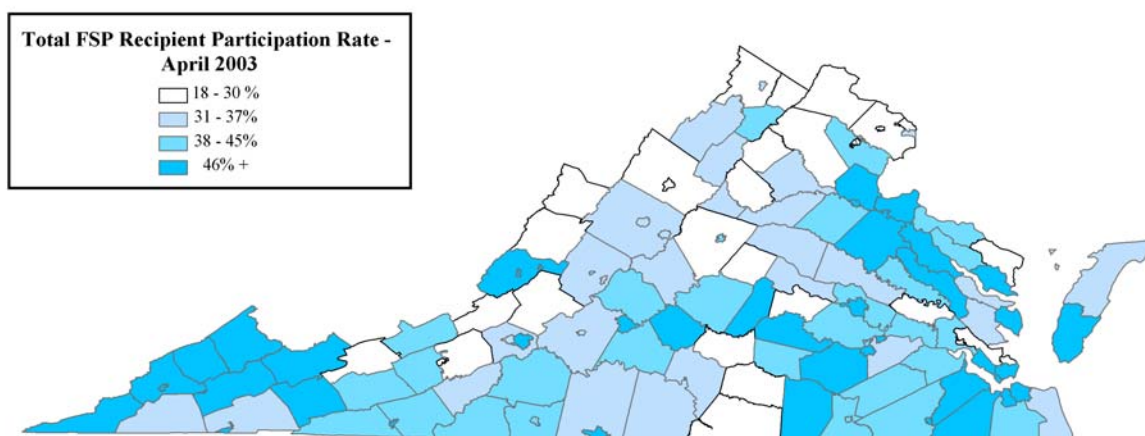
³⁵ FAMIS is Virginia's SCHIP program. Children enrolled in this program are not included in the Medicaid counts.

Geographic Analysis—Participation Rates by Locality

FSP participation rates across Virginia's localities varied widely. There was also a distinct difference between the PA and NPA distributions.

Virginia's total recipient participation rate using this study's method of defining the denominator was 41 percent. Locality participation rates ranged from 18 percent to 74 percent. Map 1 below shows the distribution of the 120 counties and independent cities roughly divided into quartiles, with one-fourth of the localities in each of the participation rate groups.

Map 1. Total 2003 Participation Rate Distribution for Virginia's Localities



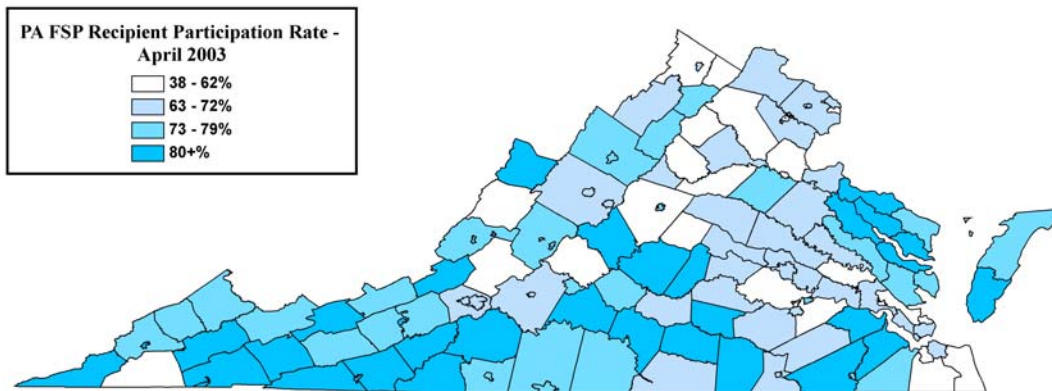
Source: VDSS - Division of Quality Management - Research Unit

In addition to the total participation rate, PA and NPA participation rates were also calculated. The geographic distribution of participation rates was quite different for the PA and NPA populations. The overall PA recipient participation rate was 74 percent, with locality participation rates ranging from 38 percent to 100 percent. Localities with PA participation rates over 80 percent were heavily clustered in the rural southwest, rural south central, and the rural northeastern counties of Virginia. This “rural” phenomenon is largely driven by high participation rates in the largely older white southwestern counties and the more predominantly African American counties in the central, southern, and northeastern counties. Map 2 shows the distribution of the 120 counties and independent cities roughly divided into quartiles, with one-fourth of the localities in each of the PA participation rate groups.

The overall NPA participation rate was 36 percent, with locality participation rates ranging from 12 percent to 74 percent. (See Map 3.) Localities with high NPA participation rates exceeding 43 percent were clustered in the largely urban Tidewater area, as well as scattered largely in rural counties in the central and northeastern areas of Virginia and in a few of the far southwestern rural counties. The map below shows the distribution of the 120 counties

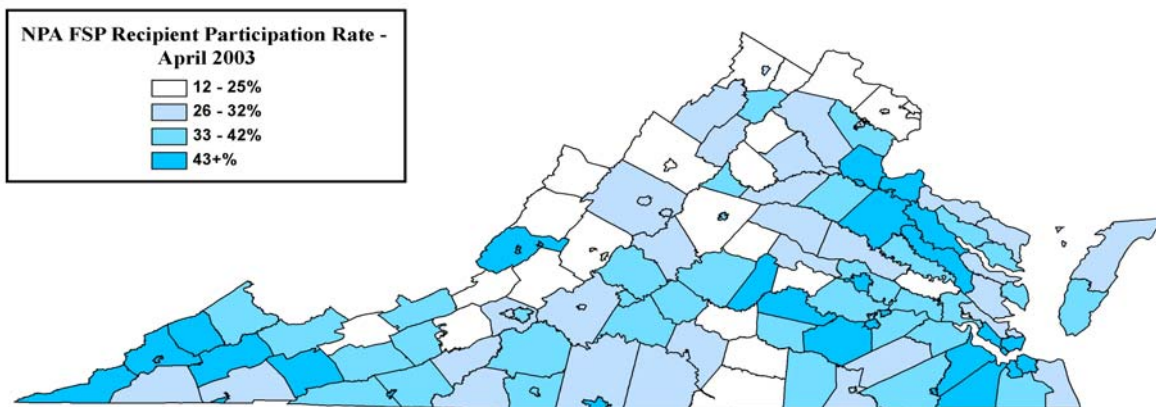
and independent cities roughly divided into quartiles, with one-fourth of the localities in each of the NPA participation rate groups.

Map 2. PA 2003 Participation Rate Distribution for Virginia's Localities



Source: VDSS - Division of Quality Management - Research Unit

Map 3. NPA 2003 Participation Rate Distribution for Virginia's Localities



Source: VDSS - Division of Quality Management - Research Unit

The NPA FSP participation rate distribution map across counties closely resembles the Total FSP participation rate map, demonstrating the high correlation between these two rates. The PA FSP participation rate map shows how these rates differ from the Total and NPA rates.

REGRESSION ANALYSIS FINDINGS

This research looks at possible explanations for the variation in FSP participation across Virginia's localities.³⁶ The Geographic Analysis section above indicated that locality variables were likely a factor in the differences in the participation rates. The lack of clustering in some areas, and the instances of low-participation rate localities contiguous with high-participation rate localities indicated a need for further investigation. Adjacent localities are likely to have the same demographic and economic characteristics, leaving local agency characteristics as a possible factor in rate differences.

Regressions were run for three response variables: Total FSP Participation Ratio, PA FSP Participation Ratio, and NPA FSP Participation Ratio. These ratios are defined as follows:

- Total FSP Ratio – Total count of April 2003 FSP recipients ÷ the estimated population under 130 percent of poverty threshold based on the special Census tables and the SAIPE adjustment for 2003.
- PA FSP Ratio – April 2003 FSP recipients with SSI countable income (not OASDI) plus TANF recipients and an estimated adjustment for GR ÷ the estimated population under 130 percent of poverty threshold based on the special Census tables and the SAIPE adjustment for 2003.
- NPA FSP Ratio – The total FSP recipients minus the PA recipients ÷ the estimated population under 130 percent of poverty threshold based on the special Census tables and the SAIPE adjustment for 2003.

Three sets of independent variables were considered explanatory variable candidates—locality variables; other government program variables; and local agency characteristics. These variables are listed in Appendix D. Locality characteristics included such factors as geographic size, population density and growth, race, ethnicity, disability status, age distribution, household composition, income, unemployment rates, and cost of living measures. Other government program data included participation in Medicaid, TANF, GA, Child Care Subsidies, WIC, Child Support, Energy Assistance, and SSI. Another group of variables focused on local agency FSP characteristics, policies, and procedures as measured by data collected from the local agency survey or VDSS administrative sources.

The list of potential explanatory variables was cleaned to ensure that there were no bivariate correlations that exceeded .70, which would indicate a linear relationship between the two variables of at least 70 percent. Winnowing of variables from the initial list was an iterative process, starting with the much broader list, running regression models, and then reviewing the output for large variance inflation factors (VIFs) in order to address higher-level multicollinearity. This iterative process also served to suggest reformatting of some variables and adding some variables to ensure full coverage of the topic and meaningful interpretation.

³⁶ This research was performed under a FY2006 cooperative agreement between ERS and Virginia Polytechnic Institute and State University, The Study of Locality, Agency, and Participation in Virginia, No. 58-5000-6-0033.

Multiple regression analysis was done with blocks of variables entered into the regressions. The blocks of variables consisted of locality, other government programs, and agency variables. Each of the regression models was limited to at most 10 significant explanatory variables yielding the highest R^2 . The models were limited to at most 10 significant explanatory variables because of the constraints of sample size—120 cases, or locality records in the data set.

Initial regressions made it clear that regardless of what locality variables were included in the list of potential explanatory variables, other government programs emerged as the major explanatory factor for PA, NPA, and Total FSP participation ratios. The Medicaid participation variable in particular emerged as a strong explanatory variable in each of the three regressions and had a moderate statistically significant correlation with all other program variables (.309 to .672). Based on these findings, Medicaid participation was used as a covariate for each of the three regressions. For the PA FSP participation ratio, attachment to TANF or SSI is a requirement, and thus as expected, these two variables also made significant contributions to the explanation for PA FSP participation. Thus, for the PA regression, TANF and SSI participation variables were also entered into the model as covariates.

In the block-by-block method, the covariate variables were entered into the model first, followed by the locality variables. The residuals from the initial run with the covariates were then entered as the response variables for the locality level run. The residuals from this locality level run were then entered as the response variable for a regression run with other government program data as explanatory variables. The residuals from the other government program regression model were entered as the response variable for a regression run with the local agency policy and procedures continuous or scale data. Finally, the residuals from this model were entered as the response variable for a regression run with the local agency indicator variables.

At each of these stages of the regressions, the best model was determined using Cp selection³⁷ (or R^2 selection if more than 10 variables were in the best model or if the best model included non-significant independent variables at the .10 significance level). The regression models were investigated to ensure there was not too high a level of multicollinearity by checking the VIF for each explanatory variable. The ceiling for an acceptable VIF was set to five. Since this research was exploratory, variables that were significant at the $p < 0.1$ were retained. Although, the .10 probability limit was allowed, only a few explanatory variables had levels of significance greater than .05 and less than .10 in the best models based on the lowest Cp.

The usual calculation of R^2 is not appropriate for the block-by-block models, since these are regressions of residuals from previous models. Therefore the R^2 from the previous models must be taken into account. The more meaningful R-squares in this situation are derived from

³⁷ The Mallows' Cp statistic is used in stepwise regressions, and is particularly useful when the number of parameters to be estimated is larger than the number of observations. The Cp can be used to determine the best subset of variables for the model. See Mallows, C.L., "Some Comments on Cp," *Technometrics*, 15, 1973, pp. 661-675.

using the Sum of Squares (SS) in each model as numerator and the corrected total SS from the first regression as denominator. These produce the "true", or Modified R^2 .

The final regression models for the Total, PA, and NPA FSP participation ratio response variables, respectively, accounted for 91 percent, 91 percent, and 86 percent of the variance (Modified R^2) in the response variable. Table 9 shows the explanatory variables in the regression models. Variables listed in red (which are also in parenthesis) have a negative relationship to the response variable, while the other variables (in black) have a positive relationship with the response variable.

Table 9. Final Food Stamp Program Participation Ratio Models			
Variable Group	Total	PA	NPA
Covariate	Medicaid Participation	Medicaid Participation	Medicaid Participation
Covariate		TANF Participation	
Covariate		SSI Participation	
Locality		% Grandparents Living in HH with grandchildren	
Locality	(% Eligible Population Over Age 70)	(% Eligible Population Over Age 70)	(% Eligible Population Over Age 70)
Locality		% total population > age 15	
Locality			Proxy for rate of low paying jobs in area
Locality	Mean Unemployment Rate		
Locality			(% of Eligible Population Asian)
Locality	(% of Eligible Population Hispanic)		% of Eligible Population Hispanic
Locality		% Female Headed Households	
Other Government Programs		(Ratio WIC participants to Eligible Population)	Ratio WIC participants to Eligible Population
Other Government Programs		Percent FSP cases with child support	
Other Government Programs	(Ratio SSI to Eligible Population)		(Ratio SSI to Eligible Population)
Other Government Programs			(% Change in Medicaid Recipients 2001 to 2003)
Agency Characteristic	FSP Cases per Staff	FSP Cases per Staff	FSP Cases per Staff
Agency Characteristic		Viable One Stop Services	
Agency Characteristic	Eligibility by Phone		
Agency Characteristic	(Locality uses FS Specialist Case Workers)		

Note: All variables significant at the .10 level.

While the possible explanatory variables are many, the dataset has only 120 localities. By the very nature of multi-program participation, any analysis risks statistical problems such as high correlation inter-relation between variables. Small changes in the variables entered into the models tended to change the resulting composition of the regression models in terms of the less predictive variables. Such variables were easily interchangeable for final models by minor edits to the list of variables entered. Examination of the pattern of correlations between the variables at the locality level helps explain this phenomenon. Locality variables in the final regression models actually represent a cluster of locality variables. These clusters, with their cluster labels (Working Poor, White Rural Elderly, Non-Hispanic Ethnic, Urban Black and Hispanic, Grandparent TANF and SSI, Urban Black, and Adult SSI) are shown in Table 10. The bolded variables in the columns under these labels are the explanatory factors in the final regression model and the other listed variables are those moderately correlated (.304 to .708) with the explanatory variables. Variables listed in red and in parenthesis are negatively related to the response variable, while variables listed in black are positively related to the response variable.

Thus, while individual variables define the regression models, these variables actually represent more broadly defined demographic characteristics as shown in the Table 10 clusters. These are areas with high concentrations of the Working Poor, White Rural Elderly, Non-Hispanic Ethnic, Urban Black and Hispanic, Grandparents with TANF or SSI, Urban Never-Married Female-Headed Black Households, and Adults with No Young Children. Additional modifications to the regression runs could result in slightly different variables in the models, but the end result will still be variables correlated with other locality variables representing similar clusters, not individual factors.

Table 10. Cluster of Locality Level Variables Related to the Total, PA, and FSP Regression Model Explanatory Variables						
Cluster Label						
Working Poor	White Rural Elderly	Non-Hispanic Ethnic	Urban Black & Hispanic	Grand-parent TANF or SSI	Urban Black	Adult SSI
Explanatory Variables in Regression Models						
Rate of Low Paying Jobs						
Mean Unemployment Rate						
	(% Hispanic)	(% Hispanic)	% Hispanic			
	(% Asian)	% Asian	(% Asian)			
	(% Persons > Age 70)	(% Persons > Age 70)				
				% Grand-parent Households		
					% Female Headed Households	
						% Adults Over age 15
Locality-Level Variables Moderately Correlated with the Explanatory Variables						
	(Public Transportation)					
	(% Black)	% Black	% Black		% Black	
	(Population Density)	Population Density	Population Density		Population Density	
	(% Families w/Children < age 6)	% Families with Children <6	% Families w/ Children < 6			(% Families w/Children < age 6)
	(% Never Married)	% Never Married	% Never Married			
	(Total Population)		Total Population			
	Congregate Meals Served					
		% One Person HH	% One Person HH			
			(% Disabled)	% Disabled		
				(Change in Eligible Population from 1999 to 2003)		
					(Square Miles)	
					% Never Married	

With a few exceptions, the agency variables are not as tightly clustered as the locality variables. Considering the variables included in the final models,

- Food Stamp Cases per staff has a weak positive correlation (.327) with the locality serving ABAWDS;
- The viable One Stop variable has a weak negative correlation (-.322) with the assessment of the director's approach to proactive outreach; and
- Determining eligibility by phone has a weak positive correlation with pre-screening by phone (.340) and verifying documents by walk-in (.339), verifying documents by phone (.350), and recertification by phone (.722).

Thus, a number of different access issues are indicated but not completely defined or described by the explanatory variables that are in the final regression models.

Clearly the local social service agencies also have some influence over the participation rates in the other government programs that they administer. The results show that as participation in one of the programs increases, participation in other programs increase. Yet, even as overall participation increases, differences in locality rates persist. Locality characteristics only account for some of the variance. Specific agency practices and characteristics directly account for some more of the variance, but the agencies also appear to indirectly affect FSP participation by their actions and policies with respect to other government programs. How and why this happens is beyond the scope of this study. We did, however, attempt to take a closer look at the locality and agency policy and practice characteristics that may indirectly affect FSP participation by limiting the other government program variables.

In Virginia, there is an expected link between FSP and Medicaid participation because there is a combined application. However, that only explains a possible tandem increase or decrease in rates, not why the rates vary across localities. Analysis of the explanation of the variation in participation rates for other government programs was beyond the scope of the current research. However, we attempted to take a closer look at the agency dynamics by controlling for Medicaid, TANF, and SSI as described above, but leaving other government programs out of the regressions. The results of these regressions for the Total, PA, and NPA FSP participation ratios show that the adjusted R^2 is .90, .92, and .82 for each of the respective regressions. This approach allowed more agency variables to emerge as possible explainers as described below.

- For the locality factors, the following additional variables were included in the models and had a positive relationship to the response variable
 - Total FSP Participation Rate—percent of eligible population Black;
 - PA FSP Participation Rate—percent of population disabled; and
 - NPA FSP Participation Rate—percent of eligible population Black.
- For the agency factors, several additional variables were included in the models:

- Total FSP Participation Rate—percent of the FSP cases with prior participation, a proxy for good case information on employment, recertification by appointment, and verification of documents at home all had a positive relationship with the response variable.
- PA FSP Participation Rate—the ratio of non-expedited to expedited FSP cases had a negative relationship with the response variable.
- NPA FSP Participation Rate—a proxy for good case information on employment, the perception that the agency had sufficient time and resources to encourage FSP enrollment, and recertification by appointment had a positive and verification by phone had a negative relationship with the response variable.

In summary, after controlling for the effect of Medicaid (and TANF and SSI in the PA runs), locality and agency factors do play a significant role in explaining the variation in FSP participation across localities. While these are important contributors, Medicaid participation and other government program variables accounted for much of the variance in FSP participation. No doubt some of the locality and agency factors affecting FSP participation also affect the level of participation in other government programs. The dynamics of this circle of dependency are outside of the scope of this study, but there can be no doubt that a full explanation of FSP participation rates is dependent on knowledge of the hows and whys of cross-program enrollment at the local level.

Findings in Support of Other FSP Participation Rate Research Results

While Phase One research was exploratory, it served as a check on findings in other FSP participation rate studies. Overall, the findings of this study's regression analyses support the results of other FSP participation rate research. Table 11 shows how this study supports the findings of other FSP participation rate research.

Table 11. Support for Other FSP Participation Rate Research Findings		
Factor	Other Participation Rate Research Findings	Evidence of Support for Other Research Findings
Aged adults	Lower ^{1 and 2}	<ul style="list-style-type: none"> Lower percents of aged adults in the locality is associated with higher Total, PA, and NPA FSP participation
Households with children	Higher ^{1 and 2}	<ul style="list-style-type: none"> Urban areas with higher percents of ethnic nonHispanic and mixed Black and Hispanic populations and high correlations with the number of families with children < 6 years old are associated with higher Total, PA, and NPA FSP participation.
TANF households	Higher ²	<ul style="list-style-type: none"> PA FSP participation rates are higher than NPA participation rates Higher TANF participation is related to higher PA FSP participation.
Households with very low income	Higher ²	<ul style="list-style-type: none"> Areas with higher unemployment and higher proportion of low paying jobs had higher NPA FSP participation rates.
SSI	Higher ²	<ul style="list-style-type: none"> Difference in PA and NPA participation rate. Higher SSI participation is related to higher PA FSP participation.
Urban areas	Higher ³	<ul style="list-style-type: none"> Urban areas with higher percents of mixed Hispanic and Black populations have higher NPA FSP participation rates. Urban areas with higher Black populations have higher PA FSP participation rates.
Percent increase in the FSP eligible population	Lower	<ul style="list-style-type: none"> Lower percent increases in the FSP income eligible population had higher PA FSP participation rates
Use of One-Stops	Higher ⁴	<ul style="list-style-type: none"> Existence of viable One-Stop agency serving locality related to higher PA participation rates.
1. Ponca, M., Ohms, J.C., Moreno, L., Zambrowski, A., and Cohen, R. "Customer Service in the Food Stamp Program." Washington, D.C. Mathematica Policy Research, Inc. 1999. 2. Kornfeld, R. "Explaining Recent Trends in Food Stamp Program Caseloads." USDA. 2002. 3. Goerge, R.M., Reidy, M., Lyons, S., Chin, M., and Harris, A. "Understanding the Food Stamp Program Participation Decisions of TANF Leavers." Chapin Hall Center for Children at the University of Chicago. 2004. 4. Paulsell, D., and Ford, M. <i>Using One-Stops To Promote Access to Work Supports—Lessons From Virginia's Coordinated Economic Relief Centers: Final Report</i> , Mathematica Policy Research, Inc., 2003.		

CONCLUSIONS

Understanding cross-program interactions among food stamps, TANF, Medicaid, and other assistance programs is important in determining whether program goals are being met. The descriptive analysis above displays why such research is needed, and also highlights the complexities of multi-program participation research.

The first fundamental research question is, why does participation in other programs increase FSP participation? Is the driver of this result something that may or may not be measured in individual characteristics, or is it the local agency operations and outreach? And, most importantly, how do local agency policies affect individuals' behavior and choices? Insight into this last question would be tremendously useful for assistance programs. This insight is needed to understand why policy matters, and how programs can help localities. A county or city cannot change its demographic characteristics, but it can change its policies, and in addition, federal and state policies and programs can be changed to better support communities.

The second fundamental research question is: What explains the differences among localities? The maps in the Geographic Analysis above show regional trends that are likely the result of socio-economic conditions. In studying the maps, however, questions arise. For example, why does Mecklenburg County in Southside Virginia have a low FSP recipient participation rate, when Brunswick County, just to the east of Mecklenburg has a high rate, and they both have high unemployment rates and low median incomes? (See Appendix B for unemployment rates and median household income levels.) How much of these differences are determined by individual characteristics, and how much by local agency policies and procedures?

The complexity of these questions and the problems in sorting out the various determining factors, coupled with the difficulties in linking administrative databases explains why so little of this research has been done. As a result, this project's goal has been to outline the questions and undertake preliminary analysis.

There are many different perspectives from which to view the dynamics of Food Stamp Program participation. This study analyzed the dynamics from two perspectives: (1) participation by FSP cases in other government programs and (2) variation in the FSP participation rates across Virginia's counties and cities.

Multi-Program Use Analysis. Multi-program use analysis looked at the use of cash and non-cash programs by Virginia's April 2003 FSP cases. The "cash" programs included SSI, TANF, GR, and OASDI. The "non-cash" programs included Medicaid, Energy Assistance, WIC, and Child Care Subsidies.

PA cases, comprising 42 percent of the April 2003 caseload, by definition participated in SSI or TANF or a combination of these programs. Many (34 percent) of the PA cases also received OASDI. NPA cases, by definition, did not receive SSI or TANF, but 27 percent of the NPA cases did receive OASDI. **Thus, PA cases are the primary users of other cash assistance programs.**

Most FSP cases had a member of the assistance unit participating in at least one of the “non-cash” government programs included in this study; usually this other “non-cash” program was Medicaid. For PA cases it was practically a given due to categorical eligibility that at least one member of their assistance unit received Medicaid. For NPA cases, almost one-fourth did not have a member of the assistance unit receiving Medicaid. Medicaid eligibility is different for children and adults, particularly with the addition of SCHIP in recent years. The children in FSP families are eligible for FAMIS (Virginia’s SCHIP program) and adult-only households without SSI or TANF may not be eligible for Medicaid. These two factors most likely account for the absence of Medicaid in one-fourth of the NPA cases. Additional research will identify the Medicaid and FAMIS characteristics of the NPA cases. **However, it seems likely that there is little room left for additional linking between the Medicaid and Food Stamp programs.**

While most of the FSP cases also had an attachment to Medicaid, only 41 percent of the FSP cases had at least one member of the assistance unit participating in at least two other “non-cash” government programs. The most common patterns were combinations of Medicaid and one other program, such as Energy Assistance, WIC, or Child Care Subsidies. Considering the broader income eligibility criteria for these programs, FSP cases that meet the other non-income criteria, such as children under five for WIC, children in the household and an adult working for Child Care Subsidies, and energy needs for Energy Assistance, are generally eligible for these programs. Of course, FSP cases do not all meet these other eligibility criteria. Thus, for both income and other types of eligibility criteria a complete overlap is not expected. Some overlap was observed, with between 40 percent and 50 percent of the Energy Assistance, WIC, and Child Care Subsidy cases or recipients receiving food stamps. **Additional research and analysis is needed to determine if there is more room for cross-program enrollment and/or a need for cross-program marketing.**

Participation Rate Analysis. The second perspective on FSP participation rates examined by this study sought an explanation for the variation in the FSP rates across Virginia’s county and city boundaries. Regression analyses found significant explanatory variables explaining the majority of the variance in FSP participation rates. After controlling for the effects of Medicaid, TANF, and SSI—locality and agency factors were found to play a significant role in explaining the FSP participation rates across localities.

Summary. Findings show evidence of multiple-government-program use, but there is still room for more cross-program enrollment and marketing. Findings also show that locality and agency factors play a significant role in explaining the variation in FSP participation across localities. Findings are consistent with other FSP participation rate research, but there is still room for further analysis to better understand these important locality and agency factors.

These results are important for food assistance policymakers and program administrators. Locality characteristics are largely out of the control of policymakers. However policymakers and administrators can modify agency policies and procedures. These findings suggest that there may be need for more program outreach to food stamp recipients, especially for the non-cash programs. Changes in programs and practices may also be warranted in order to facilitate cross-program enrollment.

APPENDIX A—ACRONYMS USED

Research-Related Terms

AU	Assistance Unit
FIPS	Federal information processing standards codes, www.census.gov/geo/www/fips/fips.html
NPA	Non-Public Assistance (NPA) cases are all food stamp cases not classified as PA
PA	Public Assistance, FSP cases were defined as those with at least one member of the assistance unit receiving either SSI or TANF
QC	Quality Control data maintained by USDA Food and Nutrition Service, host4.mathematica-mpr.com/fns/fnsqcdata/index.htm
SAIPE	Census Bureau's Small Area Income & Poverty Estimates, www.census.gov/hhes/www/saie/

Agencies and Program-Related Terms

ABAWD	Able-Bodied Adult(s) Without Dependents
ADAPT	Application Benefit Delivery Automation Project (Virginia's TANF database)
APECS	VDSS Child Support Data System
FAMIS	Family Access to Medical Insurance (Virginia's SCHIP), www.dss.state.va.us
FICA	Federal Insurance Contributions Act, usually called "payroll taxes" www.ssa.gov
F-SET	Virginia Food Stamp Employment and Training program
FSP	USDA Food Stamp Program, www.fns.usda.gov/fsp/
GA	Virginia General Assistance program, www.dss.state.va.us
HHS	U.S. Department of Health and Human Services, www.hhs.gov
LIHEAP	Low Income Home Energy Assistance Program, www.liheapch.acf.hhs.gov
OASDI	Social Security Old-Age, Survivors, and Disability Insurance Program, www.ssa.gov
PAR	Participation Access Rate, based on 100% of poverty, www.fns.usda.gov/fns/
PAI	Program Access Index, based on 125% of poverty, www.fns.usda.gov/fns/
SCHIP	State Children's Health Insurance Program, www.cms.hhs.gov/home/schip.asp
SSA	Social Security Administration, www.ssa.gov
SSI	Social Security Supplemental Security Income (SSI) program, www.ssa.gov
TANF	Temporary Assistance for Needy Families Program, www.acf.hhs.gov
USDA	United States Department of Agriculture, www.usda.gov
VDSS	Virginia Department of Social Services, www.dss.state.va.us
VEC	Virginia Employment Commission, www.vec.virginia.gov
WIC	USDA Women, Infants, and Children program, www.fns.usda.gov/wic/

APPENDIX B—VIRGINIA’S LOCALITIES

LOCALITY	FIPS code	Population estimate, base 2000	2003 unemployment rate (percent)	Median household income, 2003
ACCOMACK County	51001	38,305	4.3	\$29,994
ALBEMARLE County	51003	84,197	2.8	\$52,967
ALEXANDRIA City	51510	128,283	3.2	\$59,156
ALLEGHANY County/COVINGTON City				
Alleghany County	51005	17,215	4.6	\$37,257
Covington City	51580	6,303	5.4	\$31,609
AMELIA County	51007	11,400	3.8	\$42,530
AMHERST County	51009	31,894	4.9	\$37,465
APPOMATTOX County	51011	13,705	5.5	\$36,859
ARLINGTON County	51013	189,453	2.9	\$66,943
AUGUSTA County/STAUNTON City/WAYNESBORO City				
Augusta County	51015	65,615	3.4	\$45,347
Staunton City	51790	23,853	3.9	\$33,811
Waynesboro City	51820	19,520	4.5	\$34,313
BATH County	51017	5,048	4.5	\$36,450
BEDFORD City/BEDFORD County				
Bedford City	51515	6,299	4.7	\$30,605
Bedford County	51019	60,385	3.9	\$47,143
BLAND County	51021	6,871	5.1	\$32,647
BOTETOURT County	51023	30,496	3.4	\$51,972
BRISTOL County	51520	17,367	6.2	\$29,018
BRUNSWICK County	51025	18,419	7.2	\$30,447
BUCHANAN County	51027	26,978	7.2	\$24,317
BUCKINGHAM County	51029	15,623	4.7	\$30,526
CAMPBELL County	51031	51,105	4.9	\$38,527
CAROLINE County	51033	22,121	4.2	\$41,568
CARROLL County	51035	29,245	5.5	\$31,788
CHARLES City County	51036	6,926	5.0	\$43,238
CHARLOTTE County	51037	12,471	6.5	\$30,203
CHARLOTTESVILLE City	51540	40,088	5.0	\$31,206
CHESAPEAKE City	51550	199,184	3.8	\$53,996
CHESTERFIELD County/COLONIAL HEIGHTS City				
Chesterfield County	51041	259,848	3.4	\$61,807
Colonial Heights City	51570	16,897	4.5	\$43,754
CLARKE County	51043	12,652	3.0	\$53,651
CRAIG County	51045	5,091	4.0	\$38,779
CULPEPER County	51047	34,262	3.9	\$50,094
CUMBERLAND County	51049	9,017	4.0	\$33,598
DANVILLE City	51590	48,411	9.5	\$26,999
DICKENSON County	51051	16,395	8.4	\$25,378
DINWIDDIE County	51053	24,533	4.0	\$42,066
ESSEX County	51057	9,989	5.3	\$37,199

LOCALITY	FIPS code	Pop estimate base 2000	2003 unemp rate (percent)	Median hh income, 2003
FAIRFAX County/FALLS CHURCH City/FAIRFAX City				
Fairfax County	51059	969,749	3.1	\$82,481
Falls Church City	51610	10,377	3.2	\$79,232
Fairfax City	51600	21,498	2.8	\$67,073
FAUQUIER County	51061	55,145	3.0	\$67,990
FLOYD County	51063	13,874	3.9	\$34,968
FLUVANNA County	51065	20,047	3.2	\$49,225
FRANKLIN City	51620	8,346	4.9	\$31,815
FRANKLIN County	51067	47,283	4.3	\$38,988
FREDERICK County	51069	59,209	3.5	\$52,617
FREDERICKSBURG City	51630	19,279	5.4	\$36,499
GALAX City	51640	6,837	6.4	\$28,301
GILES County	5171	16,657	5.2	\$35,732
GLOUCESTER County	51073	34,780	3.1	\$47,137
GOOCHLAND County	51075	16,863	3.3	\$60,985
GRAYSON County	51077	16,881	6.5	\$29,298
GREENE County	51079	15,244	3.7	\$49,925
GREENSVILLE County/EMPORIA City				
Greensville County	51081	11,560	5.9	\$29,980
Emporia City	51595	5,665	7.1	\$29,320
HALIFAX County	51083	37,350	10.2	\$30,022
HAMPTON City	51650	146,437	5.1	\$39,795
HANOVER County	51085	86,320	3.1	\$65,324
HENRICO County	51087	262,193	3.7	\$51,098
HENRY County/MARTINSVILLE City				
Henry County	51089	57,981	10.0	\$31,300
Martinsville City	51690	15,368	10.5	\$27,648
HIGHLAND County	51091	2,536	4.1	\$31,124
HOPEWELL City	51670	22,277	6.4	\$32,770
ISLE OF WIGHT County	51093	29,728	3.4	\$49,357
JAMES City County	51095	48,102	3.1	\$62,271
KING AND QUEEN County	51097	6,630	4.5	\$36,271
KING GEORGE County	51099	16,803	3.2	\$57,173
KING WILLIAM County	51101	13,146	3.5	\$52,850
LANCASTER County	51103	11,567	5.3	\$35,985
LEE County	51105	23,589	5.9	\$24,992
LOUDOUN County	51107	169,599	2.8	\$89,890
LOUISA County	51109	25,627	4.0	\$43,041
LUNENBURG County	51111	13,146	5.7	\$28,625
LYNCHBURG City	51680	65,228	5.5	\$31,877
MADISON County	51113	12,520	3.8	\$40,903
MANASSAS City	51683	35,135	3.5	\$61,292
MANASSAS PARK City	51685	10,290	2.6	\$62,601
MATHEWS County	51115	9,207	3.2	\$44,684
MECKLENBURG County	51117	32,380	9.3	\$30,824
MIDDLESEX County	51119	9,932	3.3	\$38,571

LOCALITY	FIPS code	Pop estimate base 2000	2003 unemp rate (percent)	Median hh income, 2003
MONTGOMERY County	51121	83,681	3.3	\$34,446
NELSON County	51125	14,445	3.4	\$38,638
NEW KENT County	51127	13,462	3.5	\$58,123
NEWPORT NEWS City	51700	180,697	4.9	\$38,334
NORFOLK City	51710	234,403	5.7	\$31,933
NORTHAMPTON County	51131	13,093	4.8	\$29,474
NORTHUMBERLAND County	51133	12,268	5.3	\$37,997
NORTON City	51720	3,918	5.3	\$26,996
NOTTOWAY County	51135	15,725	4.6	\$30,951
ORANGE County	51137	25,881	3.8	\$46,105
PAGE County	51139	23,177	6.9	\$34,429
PATRICK County	51141	19,407	7.6	\$29,878
PETERSBURG City	51730	33,756	8.7	\$28,497
PITTSYLVANIA County	51143	61,745	6.5	\$35,960
PORTSMOUTH City	51740	100,565	5.6	\$34,413
POWHATAN County	51145	22,377	3.1	\$57,319
PRINCE EDWARD County	51147	19,720	5.1	\$29,491
PRINCE GEORGE County	51149	33,108	4.8	\$49,394
PRINCE WILLIAM County	51153	280,813	3.3	\$72,897
PULASKI County	51155	35,127	6.0	\$35,604
RADFORD City	51750	15,859	4.7	\$26,855
RAPPAHANNOCK County	51157	6,983	3.0	\$50,053
RICHMOND City	51760	197,952	5.9	\$31,620
RICHMOND County	51159	8,800	6.5	\$32,931
ROANOKE City	51770	94,911	5.2	\$31,451
ROANOKE County	51161	85,726	3.3	\$50,232
ROCKBRIDGE County/BUENA VISTA City/LEXINGTON City				
Rockbridge County	51163	20,808	3.5	\$37,796
Buena Vista City	51530	6,349	4.3	\$33,728
Lexington City	51678	6,867	4.7	\$30,981
ROCKINGHAM County/HARRISONBURG City				
Rockingham County	51165	67,714	3.0	\$43,624
Harrisonburg City	51660	40,453	3.4	\$30,918
RUSSELL County	51167	29,258	6.4	\$28,851
SCOTT County	51169	23,403	5.5	\$30,111
SHENANDOAH County	51171	35,075	3.8	\$41,797
SMYTH County	51173	33,081	7.5	\$31,567
SOUTHAMPTON County	51175	17,482	4.5	\$35,241
SPOTSYLVANIA County	51177	90,395	2.8	\$65,381
STAFFORD County	51179	92,446	2.9	\$75,456
SUFFOLK City	51800	63,677	4.1	\$46,352
SURRY County	51181	6,829	4.5	\$38,350
SUSSEX County	51183	12,504	7.7	\$30,218
TAZEWELL County	51185	44,598	5.3	\$29,339
VIRGINIA BEACH City	51810	425,257	3.8	\$50,257
WARREN County	51187	31,578	3.9	\$46,632

LOCALITY	FIPS code	Pop estimate base 2000	2003 unemp rate (percent)	Median hh income, 2003
WASHINGTON County	51191	51,103	5.4	\$35,731
WESTMORELAND County	51193	16,718	4.7	\$36,140
WILLIAMSBURG City	51830	11,998	8.2	\$34,495
WINCHESTER City	51840	23,585	3.7	\$37,143
WISE County	51195	42,195	5.6	\$28,650
WYTHE County	51197	27,599	5.2	\$33,181
YORK County/POQUOSON City				
York County	51199	56,297	3.1	\$65,302
Poquoson City	51735	11,566	3.1	\$67,664
Virginia	51	7,079,030	4.1	\$50,028

For a map of Virginia with counties and independent cities, see www.vaco.org/.

Source: Population data are from the 2000 Census of Population (corrected) from the U.S. Census Bureau. See www.ers.usda.gov/Data/Population/.

Unemployment rates are ERS estimates from the Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS) data.

Median income levels are from U.S. Census Bureau, Small Area Income & Poverty Estimates Program. See www.ers.usda.gov/data/unemployment/RDList2.asp?ST=VA.

Appendix C—USDA FOOD STAMP PARTICIPATION GRANT SURVEY

Respondent Name_____

Telephone Number_____

Respondent Position: *(Check one response.)*

☐ Director

☐ Food Stamp Supervisor

☐ Benefit Program Manager

☐ Other (specify) _____

☐ Food Stamp Manager

1. Does your agency determine Food Stamps eligibility with Food Stamp Specific Workers, Generic Benefit Workers, or both? *(Check one response.)*

☐ Generic Benefit Workers

☐ Food Stamps-Specific Workers

☐ Both

2. Overall, in your opinion, is the average monthly FS caseload per worker at your agency way too high, a little bit too high, generally manageable, somewhat lower than staff can handle, or a lot lower than staff could handle? *(Check one response.)*

☐ Way too high

☐ A little bit too high

☐ Generally manageable

☐ Somewhat lower than the staff could handle

☐ A lot lower than staff could handle

3. Through what methods are the following Food Stamp case application and recertification activities performed? (☒ **CHECK ALL that apply.**)

Application and Recertification Processes	Face-to-face in local DSS agency		Face-to- face at outreach center	Phone	Home visits	Other <i>(specify)</i>
	By appoint- ment	Walk-in				
Prescreening eligibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
Eligibility determination interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
Document verification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
Recertification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____

4. Do Food Stamp workers always, usually, sometimes, rarely, or never use computers to facilitate eligibility interviews? *(Check one response.)*

☐ Always

☐ Usually

☐ Sometimes

☐ Rarely

☐ Never

5. Which, if any, of the following practices/procedures are available to Food Stamp applicants and clients at your agency? (☒ **CHECK ALL that apply.**)

- ☐ Extended hours (outside of the 8:00 a.m. to 5:00 p.m. weekday) for application or recertification interviews
- ☐ An outside mail slot or drop box for after hours document submission
- ☐ Emergency Food Stamps available immediately, or “on-the-spot” issuance
- ☐ Retention of document verifications for future program applications
- ☐ Agency staff are trained/encouraged to inform potentially eligible clients about Food Stamps
- ☐ Outreach by DSS staff to potential Food Stamp recipients
- ☐ Outreach by advocates or other agencies to potential Food Stamp recipients

6. What is the average wait time a Food Stamp applicant experiences when waiting for an eligibility interview?

_____ hours _____ minutes

7. Overall, would you say that the staff at your agency have the time and resources to help and encourage people who need assistance to apply for Food Stamps, or are they unable to provide help? (Select the circle representing your opinion on scale of 1 to 7.)

Encourage ① ② ③ ④ ⑤ ⑥ ⑦ **Discourage**

8. How supportive is local government of the mission of your agency? (Select the circle representing your opinion on scale of 1 to 7.)

Very Supportive ① ② ③ ④ ⑤ ⑥ ⑦ **Not at all Supportive**

9. Overall, how would you rate the level of cooperation your agency has with other food providers, like food pantries, soup kitchens, and other alternative food resources in your locality? (Select the circle representing your opinion on scale of 1 to 7.)

Very Good Cooperation ① ② ③ ④ ⑤ ⑥ ⑦ **Very Poor Cooperation**

10. In your opinion, are there any unusual agency or community factors that affect Food Stamp participation rates in your locality? Please list if there are any. Continue on next page if needed.
11. On the next page please list any major changes in the areas covered by questions 1 through 10 that have taken place since April 2003.
11. (continued) Major changes since April 2003. If none, please so indicate.

Appendix D. Explanatory Variables for Regression Analysis

Topic Area	SAS Label	Definition	Source
Locality Variables			
Population Density	NPOP_PER	Population per square mile	U.S. Census Bureau – 2003 Population (U.S. Census Bureau Table 4 Annual Estimates) divided by square miles
Change in Eligible Population	PctCPop99_03	Change in population below 130 % of HHS poverty (1999 to 2003)	Special Census Tables with SAIPE population adjustments for change and comparison 1999 SAIPE and Special Census Count for under 130% of poverty for adjustment between 100% and 130%.
Total Population	NPOPULA	2003 Total population	U.S. Census Bureau, Table 4: Annual Estimates)
African American Population	NLOCPBLK	Percent of FSP income eligible population (below 130 % of HHS poverty) African American	Special Census Tables E1 and E2 – Numerator = Black population under 130% of HHS poverty (Does not include Zero Income persons) Denominator = Total population under 130% of Poverty (Does not include Zero Income persons)
Asian Population	NLOCPASN	Percent of FSP income eligible population (below 130 % of HHS poverty) Asian	Special Census Tables E1 and E2 – Numerator = Asian population under 130% of HHS poverty (Does not include Zero Income persons) Denominator = Total population under 130% of Poverty (Does not include Zero Income persons)
Hispanic Population	NLOCPHISP	Percent of FSP income eligible population (below 130 % of HHS poverty) Hispanic	Special Census Tables E1 to E 5 – Numerator = Hispanic population under 130% of HHS poverty (Does not include Zero Income persons) Denominator = Total population under 130% of Poverty (Does not include Zero Income persons)
Disabled Population	NLOCDIS	Percent of Locality 2000 civilian population age 21 to 64 disabled	Table DP-2C. Profile of Selected Social Characteristics, 2000: Veteran & Disability Status 2000 Census of Population and Housing
Adult Population	UND_15__	Percent of 2000 population age 15 plus	2000 U.S. Census Bureau Population, Age 15 Plus -- Table DP-2B

Elderly Population	P130_O70	Percent of FSP income eligible (below 130 % of HHS poverty) individuals age 70 plus	Special Census Tables E1 – Numerator = Age 70 plus under 130% of HHS poverty (Does not include Zero Income persons) Denominator = Total population under 130% of Poverty (Does not include Zero Income persons) Special Census Tables)
Marital Status	NEV_MARR	Percent of 2000 population age 15 plus, never married	2000 U.S. Census Bureau -- Table DP-2B
Grandparents as caregivers	GRANDPAR	Grandparents living in household with 1+ own grandchildren under 18 years	2000 U.S. Census Bureau - Table DP-2B
HH Composition - One Person	NONE_PER	Percent of one-person households in FSP income eligible population (< 130% of HHS poverty)	Special Census Tables E1 and E17 Numerator = One person HH under 130% of HHS poverty Denominator = Total population under 130% of Poverty Special Census Tables
HH Composition - Children in HH	sqrtFAMU6	Percent of income eligible (< 130 % of HHS poverty) families with at least one child under 6	Special Census Tables E 31 Numerator = Families with One Child Under 6 under 130% of HHS poverty (Does not include Zero Income persons) Denominator = Families under 130% of Poverty (includes Zero Income persons) Special Census Tables
Unemployment	MEAN_UN1	Mean Unemployment Rates for April 2002 through March 2003	Virginia Employment Commission
Change in Unemployment	P_P_DIFF	Percentage Point Difference in Unemployment Rate 2001 to 2003	Virginia Employment Commission
Low Paying Jobs	LUN_LMIN	Low unemployment (<.05), but low median income (<25,000). Proxy for percent of low-paying jobs.	Virginia Employment Commission Mean Unemployment April 2002 through March 2003, Median Income
Other Food Resource	RATIO_CO	Ratio Congregate or In-Home Meals to Unemployed	Meals-on-Wheels October 2002 through September 2003, Unemployed April 2003 Virginia Employment Commission Data
Agricultural Land Use	P_LD_HST	Percent of Acres of Land Harvested	U.S.D.A. National Agricultural Statistics Service March 3, 2005 website, http://151.121.3.33:8080/Census/Pull_Data_Census_Sort
Locality Geographic Size	SQ_MILE_	Area in square miles	County and city Data Book, University of Virginia, 2000 U.S. Census Data

Other Government Program Variables

FS Cases with Child Support	FS_WCH_1	Percent of April 2003 FSP cases with child support activity	April 2003 FSP database
FS Recipients with Medicaid	MEDWFS	Percent of Medicaid recipients in FSP	April 2003 Food Stamp Recipients, July 2003 Medicaid database
Change in Medicaid Cases	PCH_MEDA	Percent change in Medicaid July 2001 to July 2003	Department of Medical Assistance Services Annual July data
WIC Participants	PWICU130	Ratio WIC participants to FSP income eligible (< 130 % HHS poverty) population	May 2003 WIC participants from Department of Health website, http://www.vahealth.org/wic/Site_Participation_Report0504.pdf
Energy Assistance	NENERGY_A	Ratio 2003 Energy Assistance cases to estimated 2003 SAIPE Adjusted Population < 130% of HHS Poverty	2003 Energy Assistance cases and Special Census Data estimate of 2003 households under 130% of HHS poverty
Child Care	CHILD_CA	Percent of Child Care Subsidy cases with FSP attachment	2003 Child Care Subsidy and April 2003 FSP databases
TANF	TANF_WFS	Percent of TANF Recipients with FSP	TANF April 2003 and April 2003 FSP databases
TANF	NTANF_SAT	Percent of TANF income eligible (<100% of HHS poverty) families with child 0 to 17 under enrolled in TANF April 2003	TANF April 2003 cases database and Special Census Tables C 31 – Families With Child 0 to 17 under 100% of poverty SAIPE adjusted to 2003
SSI	SSIPETOT	Ratio SSI recipients to FSP income eligible (<130% of HHS poverty) population	Special Census Tables SAIPE Adjusted to 2002 and Social Security December 2002 Data

Local Agency Characteristic, Policy, and Procedure Variables

Workload FSP	PERPRIOR	Percent of April 2003 cases with prior FSP assistance	April 2003 FSP database
Workload FSP	FS_CAS_5	FSP case per staff	April 2003 FSP database and VDSS Local Employment Tracking System
Workload FSP	TIME_RES	Perception of available time/ resources to handle FSP caseload - scale	2004 Local Agency Administrator Survey
Workload FSP	RATO_TOT	Ratio non-expedited applications to expedited -- total applications March 2004 & April 2004	VDSS FSAPPTRK system
Case Management	RATIO__2	Ratio FSP cases with VEC reported wages to earned income. Proxy for quality of case management	April 2003 FSP database and VEC 2nd quarter 2003 wage report data
Case Management	FS_CASEN	Perception of FSP caseload manageability -- scale	2004 Local Agency Administrator Survey
Case Management	FS_SPEC	Locality does/does not use FSP Worker Specialist (Specialist only or both specialists and generic)	2004 Local Agency Administrator Survey
Work Environment and Quality	PCH_POS	Percent of positions turned over between January 2002 and January 2003 (Ignores some possible missing data from agencies that maintain their own personnel systems)	VDSS Local Employment Tracking System
Work Environment and Quality	RATIO_FR	Ratio fraud Investigations to FSP cases	FSP Quality Control 2001 to 2004 and April 2003 database
Work Environment and Quality	QC_ERROR	Percent QC Neg and Pos Errors 2001 to 2004	FSP Quality Control 2001 to 2004
Support for Work	LOC_GOV_	Perception of cooperation of food providers in locality	2004 Local Agency Administrator Survey

Support for Work	LOCAL_GO	Perception of local government support for local agency activities	2004 Local Agency Administrator Survey
F-SET	TSET_LOC	Locality is/is not an F-SET locality	April 2003 VDSS administrative records
General Relief	GRPAY	Locality does/does not have General Relief payments between July 2002 and April 2003	VDSS administrative records
One-Stops	V_O_STOP	Viable One Stop Services	Administrative list of One-Stop agencies and viability assessment by VDSS staff
Public Transportation	LO_PTSN	Locality has public transportation, not commuter or RideShare only	Virginia Department of Transportation March 1, 2005 website – www.drpt.state.va.us/locator/default.aspx
ABAWD	ABAWD	Locality is/is not an ABAWD locality	VDSS administrative records
Outreach	OUTRENHM	Local agency does/does not do FSP outreach	2004 Local Agency Administrator Survey
Outreach	DSS_STAF1	Local agency staff does/does not do FSP outreach	2004 Local Agency Administrator Survey
Outreach	ADVOCATE1	Advocates do/do not do FSP outreach	2004 Local Agency Administrator Survey
Outreach	TR_TO_EN1	Local agency staff are/are not trained to encourage FSP participation	2004 Local Agency Administrator Survey
Outreach	ANYOUTRE	Local agency does/does not have outreach for any enrollment process	2004 Local Agency Administrator Survey
Outreach	PRESCR_01	Local agency does/does not do outreach for prescreening	2004 Local Agency Administrator Survey
Outreach	ELIG_OUT1	Local agency does/does not do outreach for eligibility	2004 Local Agency Administrator Survey
Outreach	VERIFY_01	Local agency does/does not do document verification through outreach	2004 Local Agency Administrator Survey
Access	WAIT_TIM	Average wait time in minutes for eligibility processes	2004 Local Agency Administrator Survey

Access	SCALE_CT	Count of access routes (phone, walk-in, appointment, outreach, home, other) to agency for prescreening	2004 Local Agency Administrator Survey
Access	SCALE__5	Count of access routes (phone, walk-in, appointment, outreach, home, other) to agency for verification	2004 Local Agency Administrator Survey
Access	SCALE__6	Count of access routes (phone, walk-in, appointment, outreach, home, other) to agency for recertification	2004 Local Agency Administrator Survey
Access	SCALE__7	Count of access routes (phone, walk-in, appointment, outreach, home, other) to agency for any enrollment process	2004 Local Agency Administrator Survey
Access	DIRASSES	Assessment of local agency's director as encourager for FSP participation	2004 rating by VDSS staff
Access	FACILGEN	Scale of facilitating variables (extended hours, mail slot, computer use)	2004 Local Agency Administrator Survey
Access	EXTENDED1	Local agency does/does not have extended hours	2004 Local Agency Administrator Survey
Access	MAIL_SLO1	Local agency does/does not have a mail slot	2004 Local Agency Administrator Survey
Access	RETAIN_D1	Local agency does/does not retain documents	2004 Local Agency Administrator Survey
Access	ON_SPOT_1	Local agency does/does not have on-the-spot issuance	2004 Local Agency Administrator Survey
Access	PRESCR_A1	Local agency does/does not do prescreening through appointment	2004 Local Agency Administrator Survey
Access	ELIG_APP1	Local agency does/does not do eligibility determination through appointment	2004 Local Agency Administrator Survey
Access	VERIFY_A1	Local agency does/does not verify documents through appointments	2004 Local Agency Administrator Survey
Access	RECERT_A1	Local agency does/does not recertify through appointments	2004 Local Agency Administrator Survey

Access	PRESCR_WI	Local agency does/does not have walk-ins for prescreening	2004 Local Agency Administrator Survey
Access	ELIG_WAL1	Local agency does/does not have walk-ins for eligibility determination	2004 Local Agency Administrator Survey
Access	VERIFY_W1	Local agency does/does not have walk-ins to verify documents	2004 Local Agency Administrator Survey
Access	RECERT_W1	Local agency does/does not have walk-ins for recertification	2004 Local Agency Administrator Survey
Access	ANYPHONE	Local agency does/does not use the phone for any eligibility processes	2004 Local Agency Administrator Survey
Access	PRESCR_P1	Local agency does/does not prescreen by phone	2004 Local Agency Administrator Survey
Access	ELIG_PHO1	Local agency does/does not have eligibility determination by phone	2004 Local Agency Administrator Survey
Access	VERIFY_P1	Local agency does/does not verify documents by phone	2004 Local Agency Administrator Survey
Access	RECERT_P1	Local agency does/does not recertify by phone	2004 Local Agency Administrator Survey
Access	ANYHOME	Local agency does/does not use home visits for any eligibility processes	2004 Local Agency Administrator Survey
Access	PRESCR_H1	Local agency does/does not use home visits for prescreening	2004 Local Agency Administrator Survey
Access	VERIFY_H1	Local agency does/does not use home visits to verify documents	2004 Local Agency Administrator Survey